us-10-603-293-5.rge

```
AF004327 Homo sapi
CQ783874 Sequence
BD127878 Primer fo
AK075219 Homo sapi
AF213228 Sus scrof
AR224835 Sequence
AR224834 Sequence
BC027216 Mus muscu
AR224834 Sequence
BC027216 Mus muscu
AR224835 Sequence
AC01325 Mus muscu
AF034699 Bos Cauru
AR224833 Sequence
AC011835 Homo sapi
AC031095 Homo sapi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccaagreageageacrerrecrecrecrecarcreacagriracrecarecrecage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACGGACCCAGCCATGGCAGCGTAGCAGCCTCCGGTTCAGACGGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 TCTGGGGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 6; Length 2282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 2282)
Davis,S., Jones,P.F. and Yancopoulos,G.D.
Nucleic acids encoding TIE-2 ligand-2
Patent: US 5814464-A 5 29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1. .2282
/organism="unknown" '
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 2282;
100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2282 bp
Sequence 5 from patent US 5814464.
AR043313.1 GI:5964321
                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                                                                                        AF233228
AR224835
AF187858
AR224834
BC027216
AF004326
                                                                                                                                                                                              AR224833
GGA131923
                                                                                                                                                                                                                            CQ720023
AR224836
AC011835
AC091095
AC018398
AY563557
HSA289781
                                                                                                                                                                                                                                                                                                                                  AC091095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Pest Local Similarity 10v...
   99.4 2269
96.3 2624
96.3 2624
96.3 2624
84.4 1973
64.1 2325
56.6 1370
50.0 1491
47.3 2471
47.3 2471
43.3 1459
33.4 1459
33.4 1497
33.2 1881
26.2 18315
26.2 18315
26.1 18325
26.1 18325
26.1 18325
26.1 18325
26.1 18325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown
    2269
2197
2197
1925.8
1400.0
1140.6
11800.2
1140.6
1068.8
1080.2
1080.2
1080.2
1080.2
1080.2
1080.2
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
598.6
59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
AR043313
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
      윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR043313 Sequence
AR667737 Sequence
AR224830 Sequence
AR403899 Sequence
AR403899 Sequence
AR403895 Sequence
AR176322 Sequence
BD271280 Compositi
BD273390 Cancer tr
AR183517 Sequence
AR213705 Sequence
AR213705 Sequence
AR213705 Sequence
AR213705 Sequence
AR22748 Sequence
AR451799 Sequence
AR451799 Sequence
AR462244 Sequence
AX490657 Sequence
AX490657 Sequence
                                                                                                         July 29, 2005, 01:41:14; Search time 10185.7 Seconds (without alignments) 10855.925 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                   1 gaattootgggttggtgtt.........tacccatatgtcctgaattc 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                           9416466
                     GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                             4708233 segs, 24227607955 residues
                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                               summaries
                                                                                nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  156851
AR224830
AR429415
AR176322
BD271280
BD273390
AR183468
AR183517
AR213705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX482244
AX042263
AX490657
AX671082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR282748
AR451799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR043313
AR067737
                                                                                                                                                                                                                                IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match Length DB
                                                                                                                                                                     US-10-603-293-5
2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                         9D ba: *
9D htg: *
9D om: *
9D om: *
9D ph: *
9D ph: *
9D pr: *
9D pr: *
9D pr: *
9D vo: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.0011
0.0001
0.0000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                      Perfect score:
                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                      Minimum DB
Maximum DB
                                                                                  nucleic
                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
No.
```

ö

9 9 180

180

240 300

240

120

us-10-603-293-5.rge

8 8 8 8 8 8 8 8 8 8 8

8 & B

ò

요 상 원

6 B 6 B 6 B 6

1381 ATAMAGTGGANTTGGTNACCTTCAGAGANTNTTGGCTGGANATGAGTTTGTTTCCC 1440	RESULT 2 AR067737 AR067737 LOCUS DEFINITION Sequence 5 from patent US 5851797. ACCESSION AR067737.1 GI:5998959 KEYWORDS .
10	1261 TCCCTAATTCTACAGAAGACATCAAGGCCTACTGTGACAGGAAGCTGGAAGCGCGGCT 1320

8 6 8 6 8 6 8 6 8

	1021 AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAATAGTGACTGCCACGGTGAATAATT 1080 1021 AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAATAGTGACTGCCACGGTGAATAATT 1080 1081 CAGTTCTTCAAAAGCAGCAACATGATCTCCATGGAAGAAAAAAAA	CAGTTCTTCAAAAGCACCACCATGATCTCATGAGACAGTTAATAACTTACTGACTATGA TGTCCACATGAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGA TGTCCACATCAAAACATGAAGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA	GAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGCCATCTACAATGCCATCTACACTTAACAT  [	1261 TCCCTAATTCTACAGAAGACATCAAGGCCTACTGACATGGAAGCTGGAGGGGGGT 1320 1261 TCCCTAATTCTACAGAAGACATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGGGT 1320 1261 TCCCTAATTCTACAGAAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGGGT 1320 1321 GGACAATTCAGGGAGATGGCAGCGTGATTTTCAGAGGAGGACTTGGAAAGAAT 1380	GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAAT ATAAAGTGGGATTTGGTAACCCTTCAGGAGAATTTGGCTGGGAAATGAGTTTGTTT	1381 AITAAAGIGGGATTTGGTAACCTTCAGGAGATATTGGCTGGGAATGAGTTTGTTT		1561 ACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAATG 1620		CAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCACACTAGAACAGAAAGGCTACTATCAACTAACAACTAGAAAGGCTCACACTAACAAAAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGGCTCAGAAAGGCTCAGAGAAAGGCTCAGGCT	ANGEGRACACAGA ANGEL CANCOCATION IN THE HILL HILL HILL HILL HILL HILL HILL HI	ATTGGTCAAGGCCACAACCATGATGATCCGACCAGGATTTCTAAACATCCAGTCCAATTTCGACCAGCCAG	1861 CCTGAGGACTGTCTCGAACTATTTTCAAGACTTAAGCCCAGTGCATGAAAGTCACGG 1920 1861 CCTGAGGAACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG 1920 1921 CTGCGCACTGTGTCCTCCTACCACAGAGGCGTGTGGTCGGTGCTGACGGGACCCACA 1980
666666	8 8 8	6 8 8	8 & 8	S B S	\$ A \$	<b>a</b> 5 a	y da	S 8 8	6 8 8	6 B	<u> </u>	& a	8 8
SOURCE Unknown.  ORGANISM Unknown.  Unclassified.  Unclassified.  Unclassified.  Unclassified.  AUTHORS valenzuela,D.M., Jones,P.F. and Yancopoulos,G.D.  TITLE Tie ligand.3, methods of making and uses thereof JOURNAL Patent: US 5851797-A 5 22-DEC-1998; FEATURES 1. 2282    1. 2282     1. 2282     Acertical Patent     Acetical Pat	Oktoin Query Match 100.0%; Score 2282; DB 6; Length 2282; Best Local Similarity 100.0%; Pred. No. 0; Matches 2282; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Oy         1 GAATTCCTGGGTTTATCTCCTCCCCAGCCTTGAGGGAGGG		181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAGAGAAAGACATTTCATTG 2	241 ACGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCACCTCGGGACTC 3 [	Oy         301 TGGACGTGTTGCCCTCAAGTTTGCTAAGTTTGTTGAAAAAAAA	Db         361 GGCAGATTGTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT 420           Qy         421 TTCGGAAGACATGGACAGCATAGAAGAATATCAGGTCCAGGTCCTGCA 480           Dh         421 TTCGAAAGAATGGAAGGAAAGAAGAACAATATCAGGTCCAGCATGGATCCTGCA 480	481 GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT 5	Oy 541 CCAATGCTGTGCAGAGGGACGCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG 600	OY 601 TGCTGGAGAACATCATGGAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC 660	Oy 661 AGGACAACATGAAAAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG 720 Db 661 AGGACAACATGAAGAAAAGAAATGGTAGAGAAAAGAAATGCAGAATGCAGAAAGAA	OY 721 CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAAGT 780 ,	OX 781 TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG 840 

	361 GGCAGATTGTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGACCCATAACAACT 420 361 GGCAGATTGTTTTCTTTACTCTGAGCTGTGATTTTTTGGCCGAGCCTATAACAACT 420	421 TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA 480 	481 GCTACACTITICCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT 540	541 CCAATGCTGTGCAGGGACGCGCCCTCGAATACGATGACTCGGTGCAGGGGTGCAAG 600	601 TGCTGGAGAACATCATGGAAAACAACTCAGTGGCTAATGAAGCTTGAGAATTATATCC 660 	661 AGGACAACATGAAGAAAGGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG 720 	721 CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGGTGAGCAAACGGCGGAAGT 780 	781 TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG 840 	841 AACACTCCCTCTCGACAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA 900 	901 ACAAATTGCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGCTA	961 ACATCATCCAACTACAGTCAATAAAAGAAGAAGATCAGCTACAGGTGTTAGTATCCA 1020 	1021 AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATT 1080 	1081 CAGITCITCAAAAGCAGCAACATGAICTCAIGGAGACAGTIAAIAACTIACTGACIAIGA 1140 	TGTCCACATCAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA 	1201 GAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACAT 1260 	1261 TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGAAGGTGGAAGCTGGAGGGGGGT 1320 	1321 GGACAATTATTCAGGACGTCAGGATGGCAGGGTTGATTTTCAGAGACTTGGAAAGAAT 1380 	1381 ATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT
a è	g g	<i>장</i> 원	දු දු	<b>상</b> 옵	y g	& A	\$ G	ζς G	& 8	\$ B	දු පු	& 8	& 8	\$ G	දි දි	<i>장</i> 옵	<b>장</b> 셤	ò
		Qy 2041 GCAAGACCCTAAACATCCATAATTGGGAACACCTATGGAAAGATGAACCCG 2100 	OY 2101 AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAAGAATGTTATGTG 2160	OY 2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT 2220	OY 2221 TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT 2280	Qy 2281 TC 2282 Db 2281 TC 2282		LOCUS 158851 2282 bp DNA 11near PAT 07-OCT-1997 DEFINITION Sequence 5 from patent US 5650490. ACCESSION 156851 VERSION 156851.1 GI:2477264	_	REFERENCE 1 (bases 1 to 2282) AUTHORS Davis, Jones, P.F. and Yancopoulos, G.D. TITLE 114-2 ligand 2 JOURNAL Patent: US 5650490-A 5 22-JUL-1997;	ource		0; MISHMACCRES 0; INGELS 0; Sags retributed of LINGELS 0; Sags CRITTARTCTCCCCAGCCTTGAGGAGGAAACAACACTGTAGGA 60	61 TCTGGGGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACCCCTC CTTGGGGAGAGGAGA	121 CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG 	181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGGGAAAGAGAAGAGAAGACTTTCATTG	241 ACGGACCCATGGCAGCGTAGCAGCCTTGCGTTTCAGACGCAGCAGCTCGGACTC	DD 241 ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGGTTTCAGACGGCAGCAGGCTCGGGATTC 300 , Qy 301 TGGACGTGTTTGCCCTCAAGTTTGCTAAGCTGGTTTATTACTGAAGAAAGA

REFERENCE 1 (bases 1 to 2282) AUTHORS Davis,S. and Yancopoulos,G.D. TITLE Expressed ligand-vascular intercellular signalling molecule JOURNAL Patent: US 6441137-A 5 27-AUG-2002; FRATURES Location/Qualifiers Source /organism="unknown"   mol_type="genomic DNA"	Query Match 100.0%; Score 2282; DB 6; Length 2282; Best Local Similarity 100.0%; Pred. No. 0; Matches 2282; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Oy 1 GAATTCCTGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAACAACACTGTAGGA 60	Oy 61 TCTCGGGAGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACAGCCCTC 120	Oy 121 CCAÀGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGGAGAG 180  Db . 121 CCAAGTGAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG 180	OY 181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGGGAAAGAAGAAGAAGATTCATTG 240	OY 241 ACGGACCCAGCCATGGCAGCGTAGCAGCCTGCGTTCAGACGGCAGCAGCAGCTCGGGACTC 300  Db 241 ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	Oy 301 TGGACGTGTTTGCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGAAAGA	Oy 361 GGCAGATTGTTTTACTCTGAGCTGTGATCTTGCCTTGGCCGCAGCCTATAACAACT 420	OY 421 TTCGGAAGACATGGAAAGAAAGAAAGAAATATCAGGTCCAGCATGGTCCTGCA 480	0y 481 GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCTACGTGT 540	OY 541 CCAATGCTGTGCAGAGGACGCCGCTCGAATACGATGCAGAGGCTGCAAG 600	dy 601 IGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC 660	QY         661 AGGACAACHTGAAGAAAGAAAGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG         720           DD         661 AGGACAACHTGAAGAAAGAAATGGTAGAGAATACAGCAGAATGCAGAACAGAACGG         720	QY         721         CTGTGATGATGAATAGGGACAAACCTGTTGAACCAACAGGTGAGCAAACGGGAAGT         780           DD         721         CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACGAGCAAACGGGAAGT         780	, 781 TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTGACCTCTGG 840   1	Qy 841 AACACTCCCTCTGGGAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA 900 
DD   1381   ATAAAGTGGGATTTGGTAACCCTTCAGGAAATTGGCTGGGAATGAGTTTGTTT	Qy 1561 ACCTTAAAGGACTTACAGGACAGCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG 1620 	Qy 1621 ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA 1680 	Qy         1681 CAGGAGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC 1740           Db         1681 CAGGAGGTTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC 1740	Qy 1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT 1800 	OY 1801 ATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860	Qy 1861 CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG 1920 	Oy 1921 CTGCGCACTGTGTCCTCTTCCACACAGGGGGGTGTGCTCGGTGCTGAGGGGACCCACA 1980	OY 1981 TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGACCGAC	Qy 2041 GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG 2100	Qy 2101 AGGCTGAGAATCAGACAGTTTACÀGACGCTGCTGTCACAAGAATGTTATGTG 2160 	OY 2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT 2220	Qy 2221 TGGAACTGCATTCTTCTGAGCACTGTTATACACTGTGTAAATACCCATATGTCCTGAAT 2280	Qy 2281 TC 2282 		IOCUS AR224830 2282 bp DNA linear PAT 26-SEP-2002 DEFINITION Sequence 5 from patent US 6441137. ACCESSION AR224830 VERSION AR224830.1 GI:23333863	Unknown. Unclassi

us-10-603-293-5.rge

Qy         1981 TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA         2040           Db         1981 TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA         2040           Qy         2041 GCAAGACCCTAAACTTCTGATTAGACAGAACACTTGCAAAGATGAACCGG         2100           Db         2041 GCAAGACCCTAAACTTGTGATTAGACAGACACCTATGCAAAGATGAACCGG         2100           Qy         2101 AGGCTGAGAATCAGACAGTTTACAGACAGACACCTATGCAAAGATGATATGTG         2160           Db         2101 AGGCTGAGAATCAGACAGACAGTTAACAGAACACTATGTTATATGTG         2160           Qy         2161 CAAGTTTATCAGTAAATAACTGGAAAACAGACACTTATGTTATACAATACAGATCATTTATGT         2220           Qy         2221 TGGAACTGGTGAAATAACTGGAAAACAGAACATTATGTTATACAATACAGATCATCT         2220           Qy         2221 TGGAACTGCATTCTTGTGAAAAACAGAACACTTATGTTATACAATACAGATCCTGAAT         2280           Db         2221 TGGAACTGCATTCTTGTGAAAAACAGAACATTATGTTATACAATACACTTATTATACAATACACTTATTATACATATTAT	RESULT 5 AR403899 LOCUS DEFINITION Sequence 5 from patent US 6627415. ACCESSION AR403899 VERSION AR403899 VERSION AR403899.1 GI:40151796 KEYWORDS SOURCE Unknown. ORGANISM Unknown. ORGANISM Unclassified. REFERENCE 1 (bases 1 to 2282) AUTHORS DAVIS.S. and Yancopoulos, G.D. TITLE TIE-2 ligands, methods of making and uses thereof JOURNAL Patent: US 6627415. AUTHORS DAVIS.S. and Yancopoulos, G.D. TITLE TIE-2 ligands, methods of making and uses thereof JOURNAL Patent: US 6627415. AUTHORS DAVIS.S. and Yancopoulos, G.D. AUTHORS	Query Match 100.0%; Score 2282; DB 6; Length 2282; Best Local Similarity 100.0%; Pred. No. 0; Matches 2282; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Qy 1 GAATTCCTGGGGTTGTTTATCTCCTCCAGCCTTGAGGGAGCAACAACACTGTAGGA 60		Qy         181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAGAGAACTTTCATTG         240           bb         181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAGAGAACTTTCATTG         240           Qy         241 ACGGACCCAGCCATGGCAGCAGCAGCACTACAGACGCAGCAGCACTCGGGACTC         300           241 ACGGACCCAGCCATGGCAGCAGCAGCACTACAGAGCAGCAGCAGCAGCACTCGGGACTC         300           Qy         301 TGGACGTGTTTTTTGCCAAGCTTTCAGACGGCAGCACTCGGGAATTGTTATTACTGAAGAAAAATGT         360           Db         301 TGGACGTGTTTTTTGCTAAGCTTGCTGGTTTATTACTGAAGAAAAATGT         360           Db         301 TGGACGTGTTTTTGCTAAGCTTGCTAAGTTATTACTGAAGAAAATGT         360           TGGACGTGTTTTTGCTAAGCTGCTGTTTATTACTGAAGAAAAATGT         360
901   ACAAATTGCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGCTA	1261   TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGGACATGGAAGCTGGAGGGGGGGT   1320	ACCTTAAAGGACTTACAGGGACAGCCGCAAAATAAGCAGCATCAGCCAACCAGGAAATG 1	1681 CAGGAGGCTGGTTTGATGCATGTGGTCCTTCCAACTTGAAGGAATGTACTATCCAC 1740 1681 CAGGAGGCTGGTTTGATGCATGTGGTCCTTCCAACTTGAAGGGAATGTACTATCCAC 1740 1681 CAGGAGGCTGGTGGTTTGATGGGTCCTTCCAACTTGAAGGGAATGTACTATCCAC 1740 1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGT 1800 1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT 1800 1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT 1800	1801 ATTGGTCAAGGCCACAACCATGATGATCGGCCAGCAGATTTCTAAACATCCCAGTCCA 1860  1801 ATTGGTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860  1801 ATTGGTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860  1861 CCTGAGGAACTGTCTCCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG 1920  1861 CCTGAGGAACTGTCTCCAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG 1920  1921 CTGCGCACTGTGTCCTTTCCACCACAGAGGCGTGTGCTCGGTGCTGAAAGTCACACA 1980  1921 CTGCGCACTGTGTCCTTTCCACCACAGAGGCGTGTGCTCGGTGCTGGAGGGCCCACA 1980  1921 CTGCGCACTGTGTCCTTTCCACCACAGAGGCGTGTGCTCGGTGCTGGAGGGGCCCACA 1980

\$ 8 \$ 8 \$

음 중 음

දු දු

상 원

	1621	1681 CAGGAGGTGGTTGGTTGGTGTGTGTTGTTCTTCCTTCCTGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT	SATTTCTAAACATCCCAGTCCA 	AAGCCCAGTGCACTGAAAGTCACGG	CTGCGGACTGTGTCCTCTTCCACCACAGGGGCGTGTGCTCGGTGCTGGGGACCCACA 		GCAAGACCCTAAACHTCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCGGGGGGGG	GCTGTCACAACCAAGATGTTATGTG 	2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACATTATGTTATACAATACAGTCATCT	OY 2221 TGGAATTGTTCTTCTGGAGGACTGTTTATAACTGTTGTAAAATACCATATGTCCTGAAT 2280  DD 2221 TGGAACTGCATTCTTCTGAGCACTGTTATACACTGTAAATACCCATATGTCCTGAAT 2280	검프라	RESULT 6 AR429415 LOCUS AR429415 DEFINITION Sequence 5 from patent US 6645484.		ORGANISM Unknown. Unclassified. REFERENCE 1 (bases 1 to 2282) AUTHORS Davis,S., Bruno,J., Goldfarb,M., Aldrich,T.H., Maisonpierre,P.C., Radziejewski,C., Jones,P.F. and Yancopoulos,G.D.
361 GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTTGGCCGCAGCCTATAACAACT 420	CAAG	601 TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC 660 	661 AGGACAACATGAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACG 720 		TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG	AACACTCCCTCTCGACAAACAAAAACAGATTTTGGACCAGACCAGTGA 		ACATCATCAACTACACTAAAAAAAAAAAAAAAAAAACAAC	AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATT	CAGITICITADA DA CAGA CATAGA CATAGA CAGA CAGA CAGA CAGA		1201 GAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACAT 1260 	TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGGGGGT 	1321 GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAGAAT 1380 	1381 ATAAAGTGGGATTTGGTAACCCTTCAGGAGAATTGGCTGGGAAATGAGTTGTTTCGC 1440

8 6 6 6

8 6 8 6

\$ B \$

6 6 6 6 6 6 6 6 6 6 6 6

Š

Page 8

	י נט נט			668 CATGAAGAAAGGAAGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727 	728 GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA 787 		848 CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT 907 	908 GCAAGATAAGAACAGTTTCCTAGAAAGAAGGGGCTAGCTA	968 CCAACTACAGTCAATAAAAGAAGAAAGATCAGGTACAGGTGTTAGTATCCAAGGAAAA 1027 	1028 TTCCATCATTGAAGAACTAGAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT 1087 	1088 TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGATCTCAC 1147 		1208 IGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACATTCCCTAA 1267 		1328 TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT 1387 	1388 GGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTCGCAACTGAC 1447 	1448 TAATCAGCAACGCTATGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507
ය <i>ර</i> ්	8 & 8 	ò 8	රු සි	ò a	ඊ සි	ò a	& A	\$ G	ଧ ପ	& a	λ O	ò 8	<b>상</b> 셤	& g	& 43	% व	ð
1981 TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA 2040   QY	Qy         2101 AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAGAATGTTATGTG         2160           Db         2101 AGGCTGAGAATCAGACTGACAGTTTACAGACGTGCTGTCACAAGAATGTTATGTG         2160	OY 2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT 2220 Db 2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT 2220	Oy 2221 TGGAACTGCATTCTTCTGAGCACTGTTATACACTGTGTAAATACCCATATGTCCTGAAT 2280	Oy 2281 TC 2282 	AR176322	DEFINITION Sequence 3 irom patent US b312694. ACCESSION AR176322. VERSION AR176322.1 GI:17918677 FERWORDS Thirnown			FEATURES Location/Qualifiers source 12262 /organism="unknown" /mol_type="unassigned DNA"	B 6; Length 2269;	Matches 2269; Conservative 8 TGGGTTGGTGTTTATCTC	1 TGGGTGTTATCICCTCCCAGCCTTGAGGGAGGGAACAACAACACTGTGGGGGGGG	128 AGRICAGA TOTTCT TCCCACTGCAT TTTACTGCT TGCATGCT TGCATGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TGCATGCT TG		181 CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAAAAA	241 CAGCCATGGCAGGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTCGGGACCTTGGGACGT 308 GTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGAAGAATGTGGCAGAT HIHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH	Db 301 GEGITTGCCCTCAAGITTGCTAAGCTGCTGGTTTATTACTGAAAAAAAAAA

셤

ò

엄 ઠે g ò g 8 8 8

8

Db ò ద 8 g ઠે g ò g Š 셤 ò g ò 유

```
OS Homo sapiens (human)
PN JP 2002543093-A/2
PD 17-DEC-2000
PF 28-APR-1999 US 60/131432
PP 19HILIP B THORPE, ROLF A BREKKEN
PC 48, AG1P9/10,
PC AG1R39/395, AG1R39/395, AG1R39/395, AG1R39/395, AG1R45/00, AG1R47/
PC AG1R29/10,
PC AG1R27/02, AG1P35/00, AG1P43/00, AG1P43/00, AG1P43/00, CO7K16/30,
PC C12NS/10, C12NS/10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGGCTGACACAGCCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGITIGCCCTCAAGTTIGCTAAGCTGGTTTATTACTGAAGAAAGAATGIGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGCAGAGGGACGCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 CAGTAAAAACAGGTTTGCTACTGGAAAAAAGGGAAAGAGAAGAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCATGGACAGCATAGGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITICETCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541 Tergeagaagaacacccccrccaaracaaraccarccarcacaagacrccaagrccrcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACCTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAGAGAAGAGTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                        ource 1. .2269
Location/Qualifiers
Location/Qualifiers
Location/Qualifiers
L. .2269
/ organism="Homo sapiens"
/ nol_type="genomic DNA"
/ db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 2269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.4%; Scor.
100.0%; Pred. No. v,
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 2269; Conservative
                                                                                                                                                                                                                                                                                                                     1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             608
                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                       1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DUA/1280 COmpositions and method for treating cancer caused by selective inhibition of VEGF.
         TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD271280.1

JP 2002543093-A/2.

JP 2002543093-A/2.

Homo sapiens (human)

Homo sapiens

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 2269)

Thorpe, P.E. and Brekken, R.A.

Compositions and method for treating cancer caused by selective pinhibition of VEGS

Patent: JP 2002543093-A 2 17-DEC-2002;

BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM
                                                                                                                                                                              CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                      CTGGTGGTTTGATGATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGGCCACAACCATGATGATCCGACCAGATTTCTAAACATCCCAGTCCACGTGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                   AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTGTCCTCTTCCACACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crerercercrecacadadadecercrecacadadadadadadadadadadadadadadadada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAGTAAATAACTGGAAAAACAGAACACTTATGTTATACAATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                           CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                      1508
                                                                                                    1501
                                                                                                                                                   1568
                                                                                                                                                                                                                                                1628
                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                         1688
                                                                                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                                                                                                      1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
BD271280
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
```

ö

සි සි

ያ የ 8 & 8

8 6

8 6

g

8 8

ઠ

8 8 8

```
aminophospholipids

Ale Darent in John Sapiens

Ale English in Gi:33083158

BD273390.1 Gi:33083158

S JP 2002220297-A/2.

Homo sapiens (human)

ISM Homo sapiens (human)

RS Thorpe, P.E., Ran, S. and Brekken, R.A.

Cancer treatment using therapeutic conjugates that bind to aminophospholipids

AL Patent: JP 2002520297-A 2 09-UUL-2002;

BOARD OF REGENYS THE UNIVERSITY OF TEXAS SYSTEM

OS Homo sapiens (human)

PD 09-UUL-2002

PF 12-UUL-1999 US 60/092589,02-DEC-1998 US 60/110600 PI

PHILIP E THORPE, SOPHIA RAM, ROLF A BREKKEN

PHILIP E THORPE, SOPHIA RAM, ROLF A BREKKEN

PHILIP E THORPE, SOPHIA RAM, RAM, ROLF A BREKKEN

PHILIP E THORPE, SOPHIA RAM, ROLF A BREKKEN

PHILIP E THORPE, SOPHIA RAM, ROLF A BREKKEN

PHILIP E THORPE, SOPHIA CONJUGATES that bind to CC amcer treatment using therapeutic conjugates that bind to CC aminophospholipids

FT SOURCE

FT SOURCE

FT SOURCE (human)

PH KRY

11. 2269

FT SOURCE (human)
                                                                                                                                                                                                                                                                                                                                                                  2167
                                                                                                                                                                                                                                                                                                                                                                                                     2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  كامات-1707 PAT 17-3003 و 2269 bp DNA linear PAT 17-301-2003 Cancer treatment using therapeutic conjugates that bind to aminophospholipids.
                                                                                                                                                                   1987
                                                                                                                                                                                                                                   2047
                                                                                                                                                                                                                                                                                                 2107
                                                                                                                                                                                                                                                                                                                    2041 CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCGAGGCTGA 2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2161 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT 2220
                                                                                                                   1861 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1920
                                                                                                                                                                                         1981 GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC 2040
                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT 2227
1741 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1800
                                                                                                                                                                                                                                                                                                                                                                                     2101 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                   1801 CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                  AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                     CIGIGICCICITCCACCACAGAGGGCGIGIGCICGGIGCIGACGGGACCCACAIGCICCA
                                                                                                                                                                                                                                                                                                 CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                                                                                                                                                                                    GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                    CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                                                                                                                                                   GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.4%; Score 2269;

    .2269
    /organism="Homo sapiens"
    /mol_type="genomic DNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2221
                                     1808
                                                                                                       1868
                                                                                                                                                                       1928
                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                      1988
                                                                                                                                                                                                                                                                                                        2048
                                                                                                                                                                                                                                                                                                                                                                       2108
                                                                                                                                                                                                                                                                                                                                                                                                                                         2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
BD273390
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                             원
                                                                                                                               셤
                                                                                                                                                                     ò
                                                                                                                                                                                           셤
                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                     Š
                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCTGAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAACATTCCCTAA 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG 1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG 1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA 1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  creeregriricardecargregrecriceaacricaaacgaargracrarceacagagea 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TICTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT 1327
                                                                                                                                                                                                                                                                                                                                                        961 CCAACTACAGTCAATAAAAGAAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1020
                                                                                                                                                       840
                                                                                                                                                                                        .907
                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                       967
                                                                                                                                                                                                                                                                         780
                                                                                                                        847
                                                       787
                                                                                                                                                                                                                                                                                                                                                                                                                  TTCCATCATTGAAGAACTAGAAAAAAAAAAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                         TICCATCATIGAAGAACTAGAAAAAAAAAAAGGCGCACGGGGAATAATICAGTICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                        TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                      CCTCTCGACAAACAAAAAAAAAAAAAAAAAATTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                                                                                       CCAACTACAGTCAATAAAAGAAGAAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                        GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1748
                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                                                                                                                            1028
                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                         721
                                                                                                                        788
                                                                                                                                                                                           848
                                                                                                                                                                                                                                                         908
                                                                                                                                                                                                                                                                                                                           896
                         661
                                                          728
                                                                                                                                                          781
```

8 & 8 & 6

8 6 8 6

8 6 8 6 8 6 B

ò

중 음

TTCCATCATTGAAGAACTAGAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT TCAAAACCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC TCAAAACCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAAGAACAAATCAGCTTCAGAGACTG ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG TTCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG TGCTGAAGTTTCAAATCAGAACACACCCCAAATGGCATCTACACGTTAACATTCCCTAA	1268 TICTACAGAGAGATCAAGGCCTACTGTGAAGTGGAAGCTGGAGGGGGGGG	GGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT	1508 CTCATTGTAGACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567	1628 CACAAAGGAIGGAGCAACGACAAATGTATTIGCAAATGTTCACAAATGCTAACAGGAGG 1687		1868 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1927	1988 GATTAGAGCCTGTAAACTTTATCACTTAAACTTGATCACTTAACGACCAAAGCAAGC
8 8 8 8 8 8 8	A & A	& A & A	8 8 8	& a & a	6 G G	B & B &	8 6 8 6 8
Best Local Similarity	188 CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAGAAGAACTTTCATTGATGGACC 247	GTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGAAGAATGTGGCGAGATGTGTGCCCGAGATGTTGTTGTTGTTGTTGTGTGCCAGATGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT	GAGCATGGACCATAGGAAAGAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC	TTTCCTCTGCCAGAGATGGACACTGCCGCTCTTCCTCCAGCCCCTAGGTCCAATGC TGTGCAGAGGGACGCGCCGCTCGAATACGATGACTCCGGTGCTCCAAGGCTGCAGGCTGCAGGCTGCAGGCTGCAGGAGGCTGCAGGAGCTGCAGGAGGCTGCAAGTGCTGGA TGTGCAGAGGGACGCGCCCGCTCGAATACGATGACTCGGTGCAGGCTGCAAGTGCTGGAAATATATAT	GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA CATGAAGAAAGAAAACGTAGAGAATGCAGTACAGAACCAGACGACAA [	GAIAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA TGTGGAAGCCCAAGTATAAATCAGACCACGAGACTTGAACTTCAGCTCTGGAACACTC [	841 CCICTCGACAAATTGGAAAAACAGATTTTGGACCAGACCA

g

ઠે

ద

δ

```
1447
                                                                                                                                                                                                                 1087
                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                             1147
                                                                                                                                                                                                                                                                            1207
                                                                                                                                                                                                                                                                                                         1267
                                                                                                                                                                                                                                                                                                                                       1327
                                                                                                                                                                                                                                                                                                                                                     1320
                                                                                                                                                                                                                                                                                                                                                                     1387
                                                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                                                 1507
                                                                                                                                                                                                                                                                                                                                                                                                                                               1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                  1027
                                                                                                                                                                                          1200
                                                                                                                                     900
                                                                                                                                                    967
                                                                                                                                                              780
                                                                                         847
                                                                                                        840
                                                                                                                      907
             9
                             727
                                           720
                                                          787
667
                                                                                                                                                                                                               TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCCAC
                                                                                                                                                                                                                                                     GGGATTIGGTAACCCTTCAGGAGAATATIGGCTGGGAAATGAGTTIGTTTCGCAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                            CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                         CCAACTACAGTCAATAAAAGAAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                                                                                                            ATCAAACTCAGCTAAGGACCCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                                                                                                                        TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT
                                                                                                                                                                                                                                                                                                                                                                     TATTCAGCGACGTGAGGATGGCAGGCTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
CTTGGAACACTC
                                                                                                                                                    CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTTGTGAT
                                      GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                      1088
                                                                                                         781
                                                                                                                                       841
                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                              1148
                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                           1208
                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                          1268
                                                                                                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                       1328
                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                     1388
                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                               899
                                              199
                                                             728
                                                                                           788
                                                                                                                        848
                                                                                                                                                      908
                                                                                                                                                                     901
                                                                                                                                                                                     968
                                                                                                                                                                                                   961
                601
                                                                           721
 809
                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                          d
                                                                       8 S
                                                                                                     셤
                                                                                                                        ò
                                                                                                                                    g
                                                                                                                                                   8
                                                                                                                                                                   셤
                                                                                                                                                                                    8
                                                                                                                                                                                               g
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                            8 8
 8 6
                           જે
                                                            ò
                2220
                                                                                                                                                                                                                                         ö
                                                                                    20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCATGGACAGCATAGGAAGGAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                             367
                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                      AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG 127
                                                                                                                                                                                                                                                                                                                   AGCAGGACTGTTCCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA 427
                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GIGITTGCCCTCAAGTTTGCTAAGCTGCTGCTTTATTACTGAAGAAGAAGAATGTGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                             TGTGCAGAGGGACGCGCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
 CAGTAAAAACCAGGTTTGCTACTGGAAAAAAGAGAAAAAGAGAAAAGTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACGT
                                                                                                                                                                                                                                                        Gaps
                                              2269
                               2276
                                                                                     PAT
                                                                                                                                                                                                                                         ö
                               GCAITCTTCTGAGCACTGTTTATACACTGTGTAAATACCATATGTCCT
                                                                                                                                     Unchrows...
Unclassfiled.
1 (bases 1 to 2269)
1 Thorpe, P.E. and Brekken, R.A.
Antibody compositions for selectively inhibiting '
Patent: US 6342219-A 3 29-JAN-2002;
Localian Qualifiers
                                                                                    linear
                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                           DB 6;
                                                                                     DNA
                                                                                                                                                                                                                          Query Match 99.4%; Score 2269; I Best Local Similarity 100.0%; Pred. No. 0; Matches 2269; Conservative 0; Mismatches
                                                                                                                                                                                                    DNA"
                                                                                    2269 bp
3 from patent US 6342219
                                                                                                                                                                                     1, .2269
/organism="unknown"
/mol_type="unassigned
                                                                                     AR183468
Sequence 3 from patent 1
AR183468
AR183468.1 GI:20227437
                                                                                                                           Unknown
                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       548
                 2161
                                 2228
                                              2221
                                                                                                                                                                                                                                                                                       89
                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                   188
                                                                                                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                                                                                                                                             368
                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
   2168
                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                       source
                                                                     RESULT 10
AR183468
LOCUS
DEFINITION
                                                                                                                                 ORGANISM
                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                       AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                 REFERENCE
                                                                                                                                                                                                             ORIGIN
```

ద

ò

8 8 8

g ò g ઠ 6 6 6 6 6 6

a a

g

us-10-603-293-5.rge

128   AGCAGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGACACACAGAGACACAGAGACACAGAGAACACAGAGAGATTTACTGCATGCCTGGAGACACACAGAGATTTACTGCATGCCTGGAGAGACACAGAGAGATTTACTGCATGCCTGGAGAGACACAGAGAGAG	DB 241 CAGCCATGGCATGGCAGCCTGGGTTTCAGACGGCAGCAGCAGGAGACTCTGGACGT 300  QY 308 GTGTTTGCCCCAAGTTTGCTAAGCTGCTTTATTACTGAAGAAGAATGTGGCAGAT 367	Qy 368 IGTITICTITACTCTGAGCTGTGATCTTGCCTTGGCCGCAGCCTATAACAACTTTCGGAA 427	Qy 428 GAGCATGGACAGCATAGGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC 487	QY         488         TITCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC 547           Db         111111111111111111111111111111111111	QY         548 TGTGCAAGAGGACGCGCGCTGCAATACGATGACTCGGTGCAAGGCTGCAAGTGCTGGA         607           Db         541 TGTGCAAGAGGACGCGCCGCTCGAATACGATGACTCGGTGCAAGAGGCTGCAAGTGCAAGTGCTGCAAGTGCTGCAAGTGCTGCAAGTGCTGCAAGTGCAAGTGCTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGAAGTGCAAGTGAAGAA	Qy 608 GAACATCATGGAAACAACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 667 	Qy 668 CATGAAGAAAGAAGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727	Qy 728 GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGGGGAAGTTAACTGA 787	Qy 788 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC 847	Qy 848 CCTCTCGACAAACAAATTGGAAAAAACAGATTTTGGACCAGACAGGGAAATAAAAATT 907 Db 841 CCTCTCGACAAACAAATTGGAAAAACAGATTTGGACCAGACAGTGAAATAAACAATT 900	Qy 908 GCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGCTA	Qy 968 CCAACTACAGTCAATAAAAGAAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1027 	Qy 1028 TTCCATGATTGAAGAAGAAAAAAATAGTGACTGCCAGGGTGAATAATTCAGTTCT 1087 	OY 1088 TCAAAAGCAGCAACATGATCTCATGAGCAGGTAATAACTTACTGACTATGATCCAC 1147 	OY 1148 ATCAAACTCAGGTAAAGACCCCACTGTTGCTAAAGAAGAAGAAATCAGCTTCAGAGACTG 1207	1208 IGCIGAAGIAITCAAAICAGGACACACACAAAAIGGCAICIACACGIIAACAITCCCIAA
1688 CTGGTGTTTGATGCTGTCTTCCAACTTGAACGGAATGTACTATCCACAGAGGA	DD 1801 CAAGGCCACAACCATGATGATCGACCAGCAGAATTTCTAAACATCCCAGTCCACGG 1860  Qy 1868 AACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGCTGGGA 1927  DD 1861 AACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1920	Qy         1928         CTGTGTCCTCTTCCACACAGAGGGGTGTGCTCCGTGCTGACGGACCCACATGCTCCA         1987           Db         1921         CTGTGTCCTCTTCCACACAGAGGGGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA         1980	OY 1988 GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAGAC 2047 	OY 2048 CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA 2107	OY 2108 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAAGAATGTTATGTGCAAGTTT 2167	OY 2168 ATCAGTAAATAACTGGAAAACACACCTTATGTTATACAATACAGATCATCTTGGAACT 2227 	OY 2228 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276	T 11 517	LOCUS AKLESSI/ 2269 DP DNA IINGAT PAT 20-APK-2002 DEFINITION SEQUENCE 3 from patent US 6342221. ACCESSION AR183517. VERSION AR183517.1 GI:20227486	-	REFERENCE 1 (bases 1 to 2269) AUTHORS Thorpe, P.E. and Brekken, R.A. TITLE Antibody conjugate compositions for selectively inhibiting VEGF JOURNAL Patent: US 6342221_A 3 29-JAN-2002;	ource	4%; Score 2269; DB 6; Length 2269; .0%; Pred. No. 0;	OY B TGGGTTGGTGTTATCTCCTCCAGCCTTGAGGGAACAACACTGTAGGATCTGGGG 67  Oh 1 TCCTTCTTTATCTCTCTCCTCCAGCTTGAGGAACAACACTGTAGGGG 67  Oh 1 TCCTTTCTTTATCTTCTTCTCTCTCTCTTCTTCTTCTTCT	68 AGAGGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCCCCAAGTG	dd Db 61 Agagggaacaacaagaacggaaggggggggggggggggg

Mon

12

540 25-SEP-2002 ö 420 547 607 909 247 240 300 367 GIGITITICCCCTCAAGTTIGCTAAGCTGCTGGTTTATTACTGAAGAAAGAATGTGGCAGAT 360 427 487 667 99 727 720 GATAGAAATAGGGACAAACCTGTTGAACCAAACGCGGGAAACGCGGAAGTTAACTGA 787 127 120 AGCAGGACTGTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG 187 180 307 9 67 aminophospholipids TGTTTTTTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACAACTTTCGGAA GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC TGTGCAGAGGGACGCCCCCCCCCCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA TGTGCAGAGGGACGCGCCCCCCGAATACGATGACTCGGTGCAGAGGCTGCAGAGTGCTGGA GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGAAGACTTTCATTGACGGACC TITCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC TGGGTTGGTTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCTCCCAAGTG CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGCCAGCAGCTCGGGACTCTGGACGT TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA PAT ; 0 AR213705 2269 bp Seguence 3 from patent US 6406693. AR213705 GI:23310988 728 AR213705 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM ò

Qy         1868 AACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA           Db         1861 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA           Db         1928 CTGTCTCTCTCCACCACAGGGCTGTGCTCGCTGCACGGGACCCACACTGCTCA           Qy         1928 CTGTGTCCTTTCCACCACAGGGCTGTGCTCGGTGCTGACGGGACCCACATGCTCCA           Db         1921 CTGTGTCCTTTCCACCACAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA           Qy         1988 GATTAGAGCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCCACATGCTCCA           Db         1981 GATTAGAGCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCACAAGACACACAC	2269 bp DNA linear GI:23316767 GI:23316767 GI:23316767  to 2269) and Brekken, R.A. and Jugate kits for selectively inhibitir 6416758-A 3 09-JUL-2002; cation/Qualifiers c_2269 c_2269 c_2269	Query Match         99.4%;         Score 2269;         DB 6;         Length 2269;           Best Local Similarity 100.0%;         Pred. No. 0;         No. 0;         No. 0;         No. 0;           Matches 2269;         Conservative 0;         Mismatches 0;         Indels 0;         Gaps 0;           Qy         B GGGTTGGTGTTTATCTCCTCCCGGCTTGAGGGAGGAACAACACTGTAGGATCTGGG 60         1         TGGGTTGGTGTTTATCTCCTCCCGGCTTGAGGAGGAACAACACTGTAGGATCTGGG 60           Qy         68 AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACGCCTCCCCAAGTG 120         Db         61 AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACGCCTCCCCAAGTG 120           Qy         128 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCTTCATTGACGACACAG 180         Db         121 AGCAGGACTGTTCTTCCCACTGCAATTTACTGCATGCTTGAAGAACACAG 180           Qy         188 CACTAAAAACCAGGTTTCCTACTGCAAAAAGAGAAAAGAGAAAAGAGAAAAGAGAAAAGAGAAAA
121   GATAGAAATAGGGACAAACCGAACCAGGGCAACGGGAAGTTAACTGA 780   781	1208   TGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACACGTTAACATTCCCTAA   1267   1201	1508 CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567 1501 CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1560 1568 AGGACTTACAGGGACAGCCGGCAAATAAGGACTCAATTATAGGATTCACCCTTAA 1560 1561 AGGACTTACAGGGACAGCCGGCAAATAAGAGCACCAGCAAATGATTTTAG 1627 1561 AGGACTTACAGGGACAGCCGGCAAAATAATTGCAAATGTTCACAAATGATTTTAG 1620 1628 CACAAAGATGAACGAACAAATGATATTTGCAAATGTTCACAAATGATTTTAG 1680 1629 CACAAAGATGAACGAAATGATATTTTGCAAATGTTCACAAATGCTAACAGAGG 1680 1640 CTGGTGGTTTGATGCAATGTATTTTGCAAATGTTCACAAATGCTAACAGAGGC 1747 1641 CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGC 1740 1748 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTATTCGCT 1807 1749 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807 1741 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807 1741 GAACACAAATAAGTTCAAACGGCATTTCAAACATCCCAGGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCGACCAGCAATTCTAAACATCCCAGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCCAGCAATTCTAAACATCCCAGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCGACCAGAATTCTAAACATCCCAGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCCAGCAATTCTAAACATTCCTAAACATCCCAGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCCAGCAATTCTTAAACATTCCTAAACATCCCAGTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCTAAACATTCTTAAACATTCCCAGTTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCCTAAACATTCTTAAACATTCCCAGTTCCACCTGAGG 1867 1801 CAAGGCCACAACCATGATGATCTCTAAACATTCTTAAACATTCCTAAACATTCCTAAGGTTCCACCTGAGGTTCTAACAGGCTAACTTCTAAACATTCTTAAACATTCCTAAACATTCCTAAACATTCTAAACATTCTAAACATTCCTAAACATTCTAAACATTCCTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAACATTCCTAAACATTCTAAACATTCTAAACATTCCTAAACATTCTAAACATTCCTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAAATTCTTAAAACATTCCTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAAATTCTTAAAATTCTTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAACATTCTAAAATTCTTAAATTCTTAAATTCTAAAATTCTTAAAATTCTTAAATTCTTAAAATTCTTAAATTCTTAAATTCTTAAATTCTTAAAA

Qy 1388 GGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT	OY 1448 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507	OY 1508 CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567	1568 AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG 			OY 1748 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTGGCT 1807	OY 1808 CAAGGCCACAACGATGATCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG 1867	OY 1868 AACTGTCGGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGGGGA 1927	OY 1928 CTGTGTCCTCTTCCACCACAGGCGTGCTCGGTGCTGACGGGACCCACATGCTCCA 1987		Oy 2048 CCTABACATCCATABITGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA 2107	Oy 2108 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT 2167	ATCT 	Oy 2228 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276 	RESULT 14 AR282748 LOCUS AR282748 2269 bp DNA linear PAT 10-APR-2003	KEYWORDS UKROWN.	
308 GTGTTTGCCCTCAAGTTTGCTAAGCTGCTCGTTATTACTGAAGAATGTGGCAGAT 367	TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGCCGAGCCTATAACAACAACAACAACAACAACAACAACAACAACAA	TGTTTTGTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTT GAGCATGGACAGCATAGGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGC  [	CAATGC 54	TGTGCAGAGGGACGCCCTCGAATACGATGACTCGGTGCTGCAGGTGCTGGA TGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCTGCAAGTGCTGGA	GAACATCATGAAAACAACCCCCCCCCAATAACAATGAAGCTTGAGAATTATATCCAGGACAA [	CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAATTACAGAACCAGACGCGGTGTAT  [	CATIGARGARANGANTIGGTANGAGATACAGGAGAATGGAGGTACAGGAACCCAGACCGGTTGGAGTTAACTGA	GATAGAAATAGGGACAAAACCTGTTGAACCAAACAGCTGASCAAACGCGSAAGTTA TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGA 	TOTGGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAACTTCTGGCAACACTC CCTCTCGACAAACAAATTGGAAAAAACAGATTTTGGACCAGAGCAGTGAAATAAACAAATT [	CATCAT	CCACTACACACAAAAAAGAAGAAAGATCAGCTACGTTCGTT	CCAACTACAGTCAATAAAAGAAGAAGATCAGCTACAGSIGITAGITATCCAAGCAAAA TTCCATCATTGAAGAAAAAAAAAAAA	TCCAC	ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG	tgctgaagtattcaaatcaggacacaccacaaatggcatctacacgttaacattccctaa 	TTCTACAGAAGAATCAAGGCTACTGTACATGGAAGCTGGAGGGGGGGG	1328 TATTCAGCGACGTGAGGAGCGTTGATTTTCAGAGGACTTGGAAGATATAAAGT 1387 

	1028 TTCCATCATTGAAGAACTAGAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT 1087	1081 TCAAAAGCAGCAGCATGATCTCATGGAGACAGTTAATAACTTACTGATATGATGTCCAC 1140 1148 ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG 1207	ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG	TOCTORAGIATION TO THE CONTROLL OF THE CONTROLL OF THE CONTROLL OF THE CONTROL OF	TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGGGG	TATTCAGCGAGGTGAGGATGGCAGCGTTGATTTCAGAGGACTTGGAAGAATATAAAGT 		1448 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGAA	1508 CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567 	1568 AGGACTTACAGGGACAGCCGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG 1627 	1628 CACAAAGGATGGAGACAACAACAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG 1687 	1688 CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA 1747 	1748 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807 	1808 CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCGGTCCACCTGAGG 1867 	1868 AACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1927 	1928 CTGTGTCCTCTTCCACCACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA 1987	1988 GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC 2047
do Qy	\$ B \$	qa <i>k</i> o	전 전 전	à a	රු පි	ර් අ	& A	පි පි	<i>장</i> 名	\$ B	දි දි	à a	충 <u>음</u>	୪ ଶ	& B	<i>₹</i> 8	ð
TITLE Antibody methods for selectively inhibiting VEGF JOURNAL Patent: US 6524583-A 3 25-FEB-2003; FEATURES Location/Qualifiers Source /organism="unknown" /mol_type="genomic DNA"	Query Match 99.4%; Score 2269; DB 6; Length 2269; Best Local Similarity 100.0%; Pred. No. 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps	1 GGGTTGGTGTTATCTCCTCCCAGCCTTGAGGGAGGAACAACACTGTAGGATCTGGGGG   1 GGGGTTGGTGTTATCTCCTCCCAGCCTTGAGGAGGAACAACAACACTGTAGGATCTGGGG	Qy     68 AGAGAGAACAAGGACCGTGAAAGCTCCTCTGTAAAGCTGACACACCCTCCCAAGTG 127       Db     61 AGAGAGGAACAAAGGACCGTGAAAGCTCTCTGTAAAAGCTGACACACCCTCCCAAGTG 120	Qy 128 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAGA	Qy 188 CAGTAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGAGATTTGATTGA	Qy         248         CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGCCAGCAGCAGCACCTCTGGACGT         307           Db         241         CAGCCATGGCAGCGTTTCAGACGCCAGCCAGCAGCAGCACTCTGGACGT         300	Oy 308 GTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGAAAGA	TOTITICITIACTCTGAGCTGTGATCTTGTCTTGGCGGGGCCTATAACAACTTTCGGAA	GAGCATGGACGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC 	488 THTCTCCTCTCTGCCAGAGATGACAACTGCCGCTTCTTCTCCACCCCTACGTGTCCAATGC  481 THTCTTCTCTGCAAAAGATGAAAATGCGGTTCTTCTTCTCAGCCCCTACGTGTCCAATGC  481 THTCTCTCTGCTGCAAAAGATGAAATGCGGTTCTTCTTCTTCAGCCCTACGTGTCCAATGC	548 TGTGCAGAGGGACGGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA 	Oy         608 GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 667           Db         601 GAACATCATGGAAAACAACAACAACAACAACAACAACAATGAAGCTTGAAAATTATATCAGGAAAA 660	668 CATGAGAAAGAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 	728 GATAGAATAGGGACAAACCTGTTGAACCAAACGGCTGAGCAAACGGGAAGTTAAACTGA 721 GATAGAAATAGGGACAAACCTGTTGAACCAAACGGGGAAGTTAAACTGA 721 GATAGAAATAGGGACAAACCTTTGAACCAAACGGGGAAGTTAAACTGA	788 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACCT	848 CCTCTCGACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATTTTGGACCAGACAGTGAAAATTTTGGACCAGACCAGTGAAATAAACAAATTTTGGACCAGACCAGTGAAATAAAACAAATTTTGGACCAGACCAGTGAAATAAACAAATTTTGGACCAGACCAGTGAAATAAACAAATTTTGAAATTTTTGGACCAGACCAGTGAAATAAACAAATTTTGAAATTTTTGAACAAATTTTGAAAATAAAAAAAA	DD 841 CCICICGACAAACAAAITGGAAAAACAGAITITGGACCAGACCA

GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC		548 TGTGCAGAGGACGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA 607	608 GAACATCATGGAAAACAACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 667 	668 CATGAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727 	728 GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAAACGGGGAAGTTAACTGA 787 		848 CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT 907 	908 GCAAGATAAGAACAGTTTCCTAGAAAAGAAGGTGCTAGCTA	968 CCAACTACAGTCAATAAAGAAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1027 	1028 TTCCATCATTGAAGAACTAGAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT 1087 	1088 TCAAAAGCAGCAACATGATCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC 1147 1081 TCAAAAGCAGCAACATGATCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC 1140			1268 TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGGGGGTGGACAAT 1327 	1328 TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAATATAAAGT 1387 			1508 CTCATTGTATGAACATTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567 
Ωp	දු පු	රු සි	\$ 60 60	کہ م <u>و</u>	ò 5	B & B	දු පු	& 8	상 염	è a	& g	දු පු	දු පු	å å	රු පි	රු සි	& 8	oy op
20	OY 2048 CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA 2107	Qy 2108 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT 2167	OY 2168 ATCAGTAAATAACTGGAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT 2227	Oy 2228 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276	RESULT 15	AR431/39 LOCUS AR451799 LOCUS LOCUS BEFINITION Sequence 3 from patent US 6676941. ACCESSION AR451799 VERSION AR451799	KEYWORDS . SOURCE Unknown. ORGANISM Unknown.	REFERENCE 1 (bases 1 to 2269) AUTHORS Thorpe, P.E. and Brekken, R.A. TITLE ALLIbody conjugate formulations for selectively inhibiting VEGF JOURNAL Patent: US 6676941-A 3 13-JAN-2004;	FEATURES Location/Qualifiers  Source 12269 "unknown"   /mol_type="genomic DNA"	4%; Score 2269; DB 6; Length 2269; .0%; Pred. No. 0;	Matches 2269; Conservative U; Mismatches U; Indels U; Saps  8 TGGGTTGGTGTTATCTCCTCCAGCCTTGAGGGAGGAACAACACTGTAGGATCTGGGG 67	1 IGGGTIGGTGITIATCICCTCCCAGCCITGAGGGAGGGAAACAAAACTGIAGGGGGGGGGG	128 AGAGAGCATCTTCCCACTGCATCTGACAGTTTACTGCATGCTGAAACAGAGAAAACAGGAAAAACAGAAAAAAGAAAAAAAA	121 AGCAGGATTGCTACCCACIGGAAAAAAGAAGAAAGAAGAAGAACTTTCATTGACGACCCTACATGAAAAAAAA	181 CAGTAAAAACCAGGTTTGCTACTGGAAAAAAAAAAAAAA	Db 241 CAGCCATGGCGAGCGCGCGCGTTTCAGACGCAGCAGCAGCTTGGAACGT 300 Qy 308 GTGTTTGCCCCCCAAGTTTGCTAAGCTGATAGTGAAAAAAGAATGTGGCAGAT 367 nh 301 GTGTTTGCCTCAAGTTTGCTAAGCTGCTTAATTACTGAAAAAAGAATGTGGCAGAT 360	368 TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA	428 GAGCATGGACATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC

aggacttacagggacagccggcaaataagcagcatcagccaaccaggaaatgatttag 1627 	CACAAAGGATGGAGACAACGACAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG 1687 	CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA 1747 	GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807 	CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG 1867 	aactgtctcgaactatttcaaagacttaagcccagtgcactgaaagtcacggctgcgca 1927 	CIGTGTCCTCTTCCACCACAGAGGGGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA 1987 	SATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGGCCCAAGGCAGGC	CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA 2107 	GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAAGAATGTTATGTGCAAGTTT 2167 	atcagtaaataactggaaaacagaacacttatgttatacaatacagatcatcttggaact 2227 	GCATTCTTCTGAGCACTGTTATACACTGTGTAAATACCCATATGTCCT 2276 
AGGACTTACA(            AGGACTTACA	CACAAAGGAT            CACAAAGGAT	CTGGTGGTTT           CTGGTGGTTT	GAACACAAAT            GAACACAAAT	CAAGGCCACA.	AACTGTCTCG                AACTGTCTCG	CTGTGTCCTC             CTGTGTCCTC	GATTAGAGCC            GATTAGAGCC	CCTAAACATC	GAATCAGACTO	atcagtaaati           atcagtaaati	GCATTCTTCT             GCATTCTTCT
1568	1628	1688	1748	1808	1868	1928	1988	2048	2108	2168	2228
oy G	yo, qo	Qy QD	yy da	Qy Dp	Qy	Qy	ςς Pb	Oy Op	Qy Dp	Qy	ογ Op

Search completed: July 29, 2005, 06:57:13 Job time : 10198.7 secs

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

nucleic search, using sw model nucleic

Run on:

July 29, 2005, 00:20:09; Search time 1301.44 Seconds (without alignments) 10379.917 Million cell updates/sec

US-10-603-293-5 2282 Title: Perfect score:

1 gaattootgggttggtgttt.....tacccatatgtcctgaattc 2282 Sequence:

IDENTITY NUC Gapop 10.0 , Gapext 1.0 Scoring table:

4390206 segs, 2959870667 residues Searched: 8780412 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB E Maximum DB E

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

N\_Geneseq\_16Dec04: Database

geneseqn2000s:\* geneseqn2001bs:\* geneseqn2001bs:\* geneseqn2002s:\* geneseqn2003as:\* geneseqn2003as:\* geneseqn2003cs:\* geneseqn2003ds:\* geneseqn2004as:\* geneseqn1980s:\* geneseqn1990s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqn2004bs:

	Description	Aat14650 Human TIE	Aat44321 Human TIE	Aav18619 Human TIE	Aaz92215 Human ang	Aaz92213 Human ang	Aac67774 Human ang	Aas70958 DNA encod	Abz35349 Human gen	Abk47716 DNA encod	Abx12556 cDNA enco	Adn95380 Human BEC	Ado28674 Human Tie	Adq09385 Human Ang	Ads13801 Human ang	Abx63023 Human cDN	Adi02709 Human cDN	Abx63024 Human cDN	Adq09386 Human Ang	Aak94849 Human ful	Adl31981 Full leng
SUMMARIES	CI.	AAT14650	AAT44321	AAV18619	AAZ92215	AAZ92213	AAC67774	AAS70958	ABZ35349	ABK47716	ABX12556	ADN95380	AD028674	ADQ09385	ADS13801	ABX63023	ADI02709	ABX63024	ADQ09386	AAK94849	ADL31981
	DB	2	~	7	٣	m	m	S	9	9	æ	11	12	12	13	æ	10	œ	12	4	12
	% Query Match Length DB	2282	2282	2282	2269	2269	2269	2269	2269	2269	2269	2269	2269	2269	2269	2384	2384	3251	2227	2624	2624
	& Query Match	100.0	100.0	99.9	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	97.9	97.9	97.7	97.2	96.3	96.3
	Score	2282	2282	2280.4	2269	2269	2269	2269	2269	2269	2269	2269	2269	2269	2269	2233.6	2233.6	2230.4	2219	2197	2197
	Result No.		7	М	4	Ŋ	9	7	80	6	10	11	12	13	14	15	16	17	18	19	20

Nucleic acid encoding TIE-2 ligand and related vectors - useful in

WPI; 1996-209850/21. P-PSDB; AAR94605. Radziejewski C,

Davis S,

81.0 55.6 53.0 53.0 1376 52.0 1387 48.0 1387 48.0 1387 46.8 8 2424 12 46.8 1497 29.3 1497 29.3 1497 20.0	Aas75801 DNA encod	Aav18616 Nucleotid	Abk10923 Gene enco	Adq09387 Human Ang	Aad49987 Human ang	Add69424 Human Ang	Aav18614 Nucleotid	Aad49995 Human ang	Adq09378 Murine An	Ads13802 Mouse ang	Aav18615 Nucleotid	Aav18613 Nucleotid	Add69415 Human Ang	Aaa51342 Ang-2-FD-	Aaa51344 Ang-2-FD-	Adq09371 Human Ang	Add69421 Human Ang	Add69391 Human PG-	Abq81802 Human PG-	Aaf24497 Human PG-	Add69397 Human Ang	Aat14649 Human TIE	Aat44320 Human TIE	Aav18618 Nucleotid	Aad58428 Human ang
21 1849.2 81.0 3533 22 1220.6 56.6 1500 24 1210 53.0 1376 25 1186.6 52.0 1387 27 1186.6 52.0 1387 27 1186.6 52.0 1387 28 1094.8 46.8 2424 30 1068.8 46.8 2424 30 1068.8 46.8 2424 31 897, 39.2 1485 33 651.2 28.3 2070 35 65.0 240825 40 551.6 24.2 2146 45 551.6 24.2 2146 45 550.2 41.1 494	AAS75801	AAV18616	ABK10923	ADQ09387	AAD49987	ADD69424	AAV18614	AAD49995	ADQ09378	ADS13802	AAV18615	AAV18613	ADD69415	AAA51342	AAA51344	ADQ09371	ADD69421	ADD69391	ABQ81802	AAF24497	ADD69397	AAT14649	AAT44320	AAV18618	AAD58428
21 1849.2 81.0 3 22 1290.6 56.6 1 24 11210 53.0 1 25 1186.6 52.0 1 26 1186.6 52.0 1 27 11406.6 52.0 1 28 1068.8 46.8 2 30 1068.8 46.8 2 31 897 39.3 1 32 73.2 32.1 1 34 651.2 28.5 2 35 646.4 228.5 2 36 595.6 26.1 240 37 595.6 26.1 240 38 595.6 26.1 240 41 551.6 24.7 2 42 551.6 24.7 2 44 551.6 24.2 2 44 551.6 24.2 2	2	~	ø	12	œ	10	~	æ	12	13	~	~	10	ო	m	12	ដ	10	ø	4	2	7	~	~	6
21 1849.2 22 1290.6 24 1210 24 1210 25 1186.6 27 1186.6 27 1186.6 28 1084.8 30 1068.8 31 897 31 897 32 44.2 33 44.2 34 651.2 35 656 36 595.6 40 551.6 41 551.6 42 551.6	3533	1500	1376	1376	1387	1387	1491	1506	2424	2424	1497	1485	732	2061	2070	62705	763	240823	240825	240825	756	2146	2146	2146	1494
21 1849.2 22 1290.6 24 1210 24 1210 25 1186.6 27 1186.6 27 1186.6 28 1084.8 30 1068.8 31 897 31 897 32 44.2 33 44.2 34 651.2 35 656 36 595.6 40 551.6 41 551.6 42 551.6	1.0	9.9	3.0	3.0	2.0	0.2	0.0	9.0	8.9	8.9	9.3	9.2	2.1	8.5	8.3	6.2	6.1	6.1	6.1	0.9	4.7	4.2	4.2	4.2	4.1
00000000000000000000444444444444444444	80	Ñ	ΙŃ	Ņ	'n	'n	ហ	4	4	4	m	m	m	Ñ	Ñ	Ñ	Ñ	ลั	Ñ	Ñ	ď	Ñ	Ň	Ö	Ŋ
	1849.2	1290.6	1210	1210	1186.6	1186.6	1140.6	1094.8	1068.8	1068.8	897	894.2	732	651.2	646.4	598	595.6	595.6	595.6	594	562.6	551.6	551.6	551.6	550.2
0000	21	22	23	24	25	56	27	28	5	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
																		O	U	U	U				

## ALIGNMENTS

Angiogenesis; neovascularisation; tumour development; wound healing; TIE; tyrosine kinase with Ig and EGF homology domains; vector; recombinant; clone; diagnosis; ischaemia; thromboembolytic disease; atherosclerosis; inflammation; diabetes; ligand bodies; delivery; targeting; ss. Human TIE-2 ligand 2-encoding DNA derived from pBluescript KS clone. Maisonpierre PC; Bruno J, Goldfarb M, Aldrich TH, ski C, Jones PF, Yancopoulos GD; Location/Qualifiers 357. .1847 /\*tag= a AAT14650 standard; DNA; 2282 BP. 94US-00319932. 94US-00330261. 94US-00348492. 94US-00353503. 95US-00373579. 95US-00418595. 95WO-US012935 (REGE-) REGENERON PHARM INC. (first entry) 07-OCT-1994; 27-OCT-1994; 02-DEC-1994; 09-DEC-1994; Homo sapiens WO9611269-A2 06-OCT-1995; 28-OCT-1996 18-APR-1996 17-JAN-1995, 06-APR-1995, AAT14650; Key RESULT 1 AAT14650  ~

```
1741
                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1741
                                                        781
                                                                                                      841
                                                                                                                               901
                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                   1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1801
             721
                                   781
                                                                                 841
                                                                                                                                                                             961
                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                 1201
                                                    a
                                                                              Š
                                                                                                    a
                                                                                                                                                g
                                                                                                                                                                          ò
                                                                                                                                                                                               g
                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                 ò
                                                                                                                             à
                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                      AAT14550 is a portion of a pBluescript KS clone encoding the human TIB-2 (hTIB-2) ligand 2. hTIE-2 ligand DNAs of the invention are recombinant versions of the native ligand coding sequences and may be used to produce the ligands at a high yield. Antibodies and receptor bodies that bind to TIE-2 ligands may be used to inhibit angiogenesis and necvascularisation (e.g. associated with tumour development) and the TIE-2 ligands the anglost of the TIE-2 ligands of ischaemia. TIE-2 ligands are also useful to promote necvascularisation and wound healing e.g. for treatment of ischaemia. TIE-2 ligands are also useful to treat thromboembolytic disease, atherosclerosis, inflammation and diabetes. Ligand argeting of growth factors, toxins etc. to sites where their presence is advantageous
                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                               TCTGGGGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                              121 CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAATGCTGTGCAGAGGGACGCGCCGCTCGAATACGATGACTCGGTGCAGGGGGGGCTGCAAG
                                                                                                                                                                                                                                                                                              TCTGGGGAGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                            CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                      AACACAGCAGTAAAAA CCAGGTTTGCTA CTGGAAAAAGAGGAAAGAGAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                              AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAAGAGAAAAAAGAGAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGACCCAGCCATGGCAGCGTAGCAGCCTTGCGTTTTCAGACGGCAGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        regacerererriececteaaerrrecraagerecregrirarracreaagaaagarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCAGATTGTTTTCTTTACTCTGAGCTGTGTGTTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCGGAAGACATGGACAGCATAGGAAAGAAGCAATATCAGGTCCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAATGCTGTGCAGAGGGACGCGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          recregadaacarcaregaaaacaacacreaeregecraareaaecrreaeaarraarec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACAACATGAAGAAAGAAATGGTAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGACAACATGAAGAAAGAAATGGTAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGT
                                                                                                                                                                                                                                                                                 TGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAAGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                           Gaps
   2
  neovascularisation, tumours, etc., or
                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                    DB 2; Length 2282
                                                                                                                                                                                                             Sequence 2282 BP; 746 A; 498 C; 520 G; 518 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                  100.0%; Score 2282;
100.0%; Pred. No. 0;
iive 0; Mismatches
                                   Fig 6; 84pp; English
diagnosis and treatment of promote wound healing, etc.
                                                                                                                                                                                                                                              Best Local Similarity 100. Matches 2282; Conservative
                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                 н
                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                   Claim 2;
                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                     Query Match
 ##X#X55555555555555
                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

1080 1080 1140 1200 1320 1440 1500 1560 1560 1680 1800 1860 1020 1020 1200 1260 1260 1380 1380 1500 1680 1740 1800 ACCITAAAGGACTIACAGGGACAGCCGGCAAAAIAAGCAGCATCAGCCAACCAGGAAAIG 1620 840 840 900 900 960 960 CAGGAGGCIGGTIGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC CAGTTCTTCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGA TGTCCACATCAAACTCCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAT ATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTGTTTCGC AGGCTTACTCATTGTATGAACATTTCTATCTCTCTCAAGTGAAGAACTCAAATTATAGGATTC ACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA ATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA AACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA AACACTCCTCTCGACAAACAAATTGGAAAAAACAGATTTTGGACCAGACCAGTGAAATAA ACATCATCCAACTACAGTCAATAAAAGAAGAAGAAGATCAGCTACAGGTGTTAGTATCCA 961 ACATCATCCAACTACAGTCAATAAAAGAAGAAAGAACATCAGGTACAGGTGTTAGTATCCA CAGTICITCAAAAGCAGCAACAIGAICICAIGGAGACAGTIAAIAACTIACIGACIAIGA TGTCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA GAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACAT GAGACTGTGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACAT AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC AGAGGCAGAACACAAAAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAATAGTGACTGCCACGGTGAATAATT AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAAATAGTGACTGCCACGGTGAATAATT TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGCGGGT receraarreragaagareaaggeeracracracagaagaregaagergaagaggaggggr GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAAT AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT ATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTT

ö

ö

Gaps

120 120 180 180

9

240 240 300

360 420 420

```
A cDNA clone (AAT44121) codes for a human TIE-2 (tyrosine kinase with Ig and EGF homology domains) ligand 2 (AAW01411) that binds the TIE-2 receptor. It was obtd. by screening a human foetal lung cDNA library in lambda gt10 with a human TIE-2 ligand 1 (see also AAT44119) sequence. TIE-2 ligand 2 is a receptor antagonist useful for blocking blood vessel growth, for tumour therapy and for treating a proliferative disorder of a blood-forming organ. The cDNA clone can be used to produce recombinant TIE-2 ligand in transformed host cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGATTATATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAATGCTGTGCAGAGGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGACAACATGAAGAAAGGAAATGCTAGAGATACAGCAGAATGCCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACAGAGCAGTAAAAACCAGGTTTGCTACTGGAAAAGAGGAAAGAGAAGAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTGCTGCTGGTTTATTACTGAAGAAGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTACACTTTCCTCCTGCCGGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT

    useful for promoting

                                                                                                                                                                                                                                                                                                                                                              TCTGGGGAGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                         Length 2282;
                                                                                                                                                                                                                                                   Sequence 2282 BP; 746 A; 498 C; 520 G; 518 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                         DB 2;
                                                                                                                                                                                                                                                                                                                          ö
TIE-2 agonists and antagonists and related DNA blocking neovascularisation, etc.
                                                                                                                                                                                                                                                                                       s; Score 2282; I
s; Pred. No. 0;
0; Mismatches
                                                          6; 113pp; English.
                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0%;
Matches 2282; Conservative 0
                                                          Claim 4; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
     ##X8X00000000XX
                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                   2040
                                                                                                                                                                                                                                                                                                                                                                    2160
                                                                                                                                                                                                                                                           2100
                                                                                                                                                                                                                                                                                              2100
                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                         2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2280
       ATTCGCTCAAGGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860
                                                                                                                CTGCGCACTGTGTCCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2280
                                                                                                                                 TGGBACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT
                                                           TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAAACGACCAAA
                                                                                                                                                                                                                                                                             AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACCAACAATGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                       CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA
                                                                                                                                                                                                                                                             GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIE-2 ligand 2; tyrosine kinase with Ig and EGF homology domain; receptor; antagonist; neovascularisation; wound healing; ischaemia; leukopaenia; thrombocytopaenia; anaemia; anglogenesis; tumour; atherosclerosis; inflammation; diagnosis; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maisonpierre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Davis S, Bruno J, Goldfarb M, Aldrich TH,
Radziejewski C, Jones PF, Yancopoulos GD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
357. .1847
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human TIE-2 ligand 2 cDNA clone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA; 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-00418595.
95WO-US012935.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96WO-US004806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (REGE-) REGENERON PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-465021/46.
P-PSDB; AAW01411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT44321 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9631598-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-APR-1995;
06-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-OCT-1996
                                                                                1861
                                                                                                                                                     1921
                                                                                                                                                                                         1981
                                                                                                                                                                                                                             1981
                                                                                                                                                                                                                                                                2041
                                                                                                                                                                                                                                                                                                    2041
                                                                                                                                                                                                                                                                                                                                      2101
                                                                                                                                                                                                                                                                                                                                                                         2101
                                                                                                                                                                                                                                                                                                                                                                                                             2161
                                                                                                                                                                                                                                                                                                                                                                                                                                               2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2281
           1801
                                              1861
                                                                                                                  1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT44321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT44321
AAT44321
AAT44321
AAC AAT
AAT
AAC AAT
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                              В
                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                            Š
                                                                          유
                                                                                                                  8
                                                                                                                                                                                         8
                                                                                                                                                                                                                                                         ठे
                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

900

9 99 9 720

480 480 540 540 720

780

1861	1921	1981	2041	2101	2161	2221 TGC 	Oy 2281 TC 2282 . Db 2281 TC 2282	RESULT 3 AAV18619 ID AAV18619 standard; DNA; 2282 BP.	AX AAV18619; XX DT 09-SEP-1998 (first entry)	an TIE-2 ligand 2 from clone pBluescript KS.	meilo ilb il an; ss. o sapiens.	FH Key Location/Qualifiers FT CDS 3571847 A'tag= a /*tag= /note= "human TIE-2 ligand 2"	XX PN WO9805779-A1. XX PD 12-FEB-1998.	AUG-1997; AUG-1996;	PR 25-0CT-1996; 96US-00740223. XX PA (REGE-) REGENERON PHARM INC.	XX PI Davis S, Yancopoulos GD;	XX DR WPI; 1998-145615/13. DR P-PSDB; AAW47532.	PT Modified human TIE-2 receptor ligand(s) - useful for promoting wound PT healing.	PS Example 8; Fig 6; 202pp; English. XX CC This is the nucleotide sequence of the human TIE-2 ligand 2, used
	841 AACACTCCCTCTCGACAAACAGAATTGGAAAAAGAGATTTTGGACCAGACCAGTGAAATAA 900 	901 ACAARTTGCAAGATAAGAACAGTTTCCTAGAAAAGAAGGTGCTAGCTA	961 ACATCAACTACAGTCAATAAAGAGAGAAAGATCAGCTACAGGTGTTAGTATCA 1020 	1021 AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAAAATAGTGACTGCCACGGTGAATAATT 1080 	1081 CAGTICTICAAAAGCAGCAACAIGATCICAIGGAGACAGTIAAIAACTIACIGACIAIGA 1140 	1141 TGTCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA 1200 	1201 GAGACTGTGGTGATATTGAAATCAGGACACCCACAAATGGCATCTACACGTTAACAT 1260 	1261 TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGGGGGGGG	1321 GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTCATTTTCAGAGGACTTGGAAAGAT 1380 	1381 ATABAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT	AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTCGCAACGCAATG AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTCGCGAACGCAATG AACTGACTAATCAGCAACGCTATGTGCCTTAAAATACACCTTAAAGACTGGGAAGGGAATG	1501 AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC 1560 	1561 ACCTTAAAGGACTTACAGGGACAGCGGCAAATAAGCAGCATCAGCCAACCAGGAAATG 1620 	.621 ATTTTAGCACAAAGGATGGAGACACACAAATGTATTTGCAAATGTTCACAAATGCTAA 1680 	CAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC	CAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC	.741 AGAGCAGAACACAAATAAGTICAACGGCATTAATGGTACTGCGAAGGCTCAGGCT 1800 .741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACGAAAGGCTCAGGCT 1800	1801 ATTCGCTCAAGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCAGTCCA 1860	CCTGAGGAACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                     g
                                                                                                         원
                                                                                                                          8
                                                                                                                                              g
                                                                                                                                                                                g
                                                                                                                                                                                                       8
                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                      음 장
                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                               8 S
                                                                                            8
                                                                                                                                                                  ò
                  8
                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                             120
                                                                                                                                                                                               120
                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                              300
method of the invention, involving the production of TIE-2 ligands which promote healing. The nucleic acids, vectors and host cells used in the method of the invention are useful for the recombinant production of the ligands. The ligands, etc. are useful for blocking blood vessel growth, promoting neovascularisation, promoting the growth or differentiation of a cell expressing the TIE receptor, blocking the growth or differentiation of a cell expressing the TIE receptor and for attenuating or preventing tumour growth in a human
                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                 ACGGACCCAGCCATGCAGCGTAGCAGCCCTGCGTTTCAGACGACAGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                           GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCCGTTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGGGGAGAGAGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                               rcresesasasaasaasaacestsaaascresersaaascresersaaascreacascerc
                                                                                                                                                                                                                                                        AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                         TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAATGCTGTGCAGGGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccaarecrerecagagegacececcercearaceareacreegedegegecrecaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGT
                                                                                                                                                              CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                             ACGGACCCAGCCAGCCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                     GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                          Gaps
                                                                                                       Length 2282;
                                                                                                                         ö
                                                                                    Sequence 2282 BP; 746 A; 497 C; 520 G; 519 T; 0 U; 0 Other;
                                                                                                                         1; Indels
                                                                                                      DB 2;
                                                                                                     Score 2280.4; Pred. No. 0; 0; Mismatches
                                                                                                                         ..
                                                                                                       100.0%;
                                                                                                      Query Match
Best Local Similarity 100.
Matches 2281; Conservative
                                                                                                                                           GAATTCCTGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                 61
                                                                                                                                                                                                61
                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                  8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
    ઠ
                                                                                                                                                                               8 8
                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                             6 6 6
                                                                                                                                                                                                                  ò
```

```
Sequence 2269 BP;
                                                                                                                                                                                                                    ω
                                                                                                                                                                                                                                                                                       68
                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
8 \pm 6 
                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                  2040
                                                                                                                                                                                                                                                                                                          2280
                                                                                        2100
                                                                                                                           2100
                                                                                                                                                             2160
                                                                                                                                                                                                 2160
                                                                                                                                                                                                                                     2220
                                                                                                                                                                                                                                                                      2220
                                                                                                                                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents the human angiopoietin-2 (Ang-2) nucleotide sequence. Ang-2 is a naturally occurring angiogeneels antegonist when vascular endothelial growth factor (VEGF) levels are low, and generally counteracts the blood vessel macuration and stability mediated by Ang-1 is a naturally occurring angiogeneels agonist, and is a maturation or stabilisation factor, converting immature vessels to mature vessels. Both Ang-1 and Ang-2 are useful in a therapeutic approach to the treatment of vascularised tumours. The invention relates to a composition composition an anti-aminophospholipid antibody, or its antigen binding region. The composition is used to kill tumour vasculature endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; angiopoietin-2; Ang-2; aminophospholipid; vascularised tumour; unconjugated anti-aminophospholipid antibody; tumour blood vessel marker; cancer; treatment; angiogenesis; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      composition for killing tumor vascular endothelial cells for treating d tumors, comprises unconjugated anti-aminophospholipid antibody.
                                       TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCCAAA
                                                                                                                                                                                                                                                                                                                           2221 TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAAATACCCATATGTCCTGAAT
                  TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA
                                                                                                              GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAAACACCTATGCAAAGATGAACCC
                                                                                                                                                             AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTG
                                                                                                                                                                                               AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTG
                                                                                                                                                                                                                                   CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                      GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG
                                                                                                                                                                                                                                                                      CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                                                                                                                                                                                                                                            TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 222; 226pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ92215 standard; DNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human angiopoietin-2 (Ang-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US015600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0092672P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0110608P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-182175/16.
P-PSDB; AAY78906.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ran S;
                                                                                                                                                                                                                                                                                                                                                                                TC 2282
                                                                                                                                                                                                                                                                                                                                                                                                                 TC 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200002584-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thorpe PE,
                                                                                                                        2041
                                                                                                                                                             2101
                                                                                                                                                                                                 2101
                                                                                                                                                                                                                                                                     2161
                                                                                                                                                                                                                                                                                                                                                                                2281
                1981
                                                  1981
                                                                                      2041
                                                                                                                                                                                                                                     2161
                                                                                                                                                                                                                                                                                                        2221
                                                                                                                                                                                                                                                                                                                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ92215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       solid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                         g
                                                                                    ð
                                                                                                              임
                                                                                                                                                    ò
                                                                                                                                                                                        임
                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                        q
```

```
ö
                                                                                                                                                                                                                                                                                                                                                              127
                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         967
                                                                                                                                                                                                                                                                          67
                                                                                                                                                                                                                                                                                                                 9
cells. Aminophospholipids are stable and specific markers accessible on the luminal surface of tumour blood vessels. Ang-1 or Ang-2 may be used in the composition of the invention. The composition is used to treat malignant or benign vascularised tumours in animals, especially large
                                                                                                                                                                                                                                                                                                                                                                AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGAACTGITCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAACACACAG
                                                                                                                                                                                                                                                                                                          TGGGTTGGTTTTATCTCCTCCGGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAGAGAAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTTTTTTTTTTTGGGGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGCATGGACAGCATAGGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 IGIGCAGAGGGACGCCCCCCCCCCCGATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACATCATGGAAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAGAAATAGGGACAAAACCTGTTGAACCAAACAGCTGAGCAAACGGGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAGAGAAAGAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCAGAGGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCTCGACAAACAAATTGGAAAAACAGATTTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                             ;
                                                                                                                                                                               DB 3; Length 2269;
                                                                                                                                     742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                             .
0
                                                                                                                                                                            99.4%; Score 2269; I
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                      Best Local Similarity 100.
Matches 2269; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

1028   TTCCATCATTGAAGAACTAGAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT   1081   TTCCATCATTGAAGAACTAGAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT   1080   TTCCATCATTGACTGACTGCCACGGTGAATAATCAGTTCT   1080   TTCCAAAGCCACCACTGACTGACTGACTGCCACGGTGAATAATCAGTCCCA   1141   TCAAAACTCACCACAGACTCAAAACACTGAATAACTTCTGACTATGATGTCCCC   1140   TTCAAACTCAGCTAAGACCACTTGAAAACTCACAGACTG   1200   TGCTGAAGTTTCAAACTCAGCACACTGTTGCTAAAAACTCACAGACTG   1201   TGCTGAAGTTTCAAACTCAGCACACTCCAAAACACACACTTCACAGACTG   1201   TGCTGAAGTTTCAAATCAGCACACACACACAAATGACATCACACACA	1688   CTGGTGGTTTGATGCTCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA   1740
3	3       3
Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;   Query Match   99.4%; Score 2269; DB 3; Length 2269; Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Matches 2269; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Indels 0; Indels 0; Gaps 0; Mismatches 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Mismatches 0; Mismatches 0; Indels 0; Gaps 0; Indels 0; Gaps 0; Indels 0; I	608 CARGARAGAAACAGTCGGCTAATGAAGCTGAGGATTATATCCAGGACAA 609 GAACATCATGGAAAACACTCAGTGGCTAATGAAGCTTGAGGATTATATCCAGGACAA 601 GAACATCATGGAAAACACTCAGTGGCTAATGAACTTGAGAATTATATCCAGGACAA 608 CATGAAGAAAGAAACACTCAGTGGCTAATGGAGCTTGAGAATTATATATCCAGGACAA 609 CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGTGAT 61 CATGAAGAAATAGGGACAAACCTGTTGAACACAGCAGAACGGCTGATAATAAATA

g

ò

g

ò

셤

ઠે

```
1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAAACTCAGCTAAGGACCCCCACTGTTAAAGAAGAACAAATCAGCTTCAGAGACTG 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                  487
                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                         547
                                                                                                                                                                                                                                                                                                                                                                                                                                  607
                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                             187
                                                        180
                                                                                      247
                                                                                                                240
                                                                                                                                            307
                                                                                                                                                                      300
                                                                                                                                                                                                   367
                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                          427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCTCGACAAACAAAAAAAAAAAAAAAAAAAAAATTTTGGACCAGACCAGACCAGAATAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCCATCATTGAAGAACTAGAAAAAAAAAAAAGGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCCAC
                                                                                                                                                                                                                                                                          GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCTCGACAAAAAAGAAAAAAAAAAAAAAAAAAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAACTACAGTCAATAAAAGAAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCATCATTGAAGAACTAGAAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG
                                               GAACAICATGGAAAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                   241 CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGCT
                                                                                                                                                                                                   TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                    GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                               421 GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                           TITICETCETGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCAGGCCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAGAAAGGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                            CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                            121
                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                               368
                                                                                                                                                                                                                                                                                                                                                                                                                                     548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1148
                                                                                                                                               248
                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                       428
                                                                                                                                                                                                                                                                                                                                                                              488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
     61
                                  128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                8 8
                                                                                                             셤
                                                                                                                                              ò
                                                                                                                                                                   셤
                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                ે
                                                                                                                                                                                                                                                             ઠે
       2167
                                  2160
                                                                                          2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to anti-Vascular Endothelial Growth Factor (VEGF) antibodies that bind to the same epitope as the monoclonal antibody ATCC FPA 1595 and which significantly inhibit VEGF binding to the VEGF receptor VEGFR2, without inhibiting VEGF binding to the VEGF receptor VEGFR1. The present sequence is the coding sequence for human angiopoietin-2. Angiopoietin-2 may be operatively attached to the anti-VEGF antibodies of the present invention. Angiopoietin-2 acts to disturb capillary structure and is thought to lead to vessel regression. The anti-VEGF antibodies of the present invention are useful for the treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG
                         GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                              ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                              ATCAGTAAATAACTGGAAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
       GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunogenic composition for the treatment and diagnosis of cancer comprises an anti-VEGF (vascular endothelial growth factor) antibody binding the same epitope as the monoclonal antibody ATCC PTA 1595.
                                                                                                                                                                                                                                                                                                                                   Human; angiopoietin-2; cytostatic; antiproliferative; vascular endothelial growth factor; VEGF; antibody; VEGF2 receptor; blood vessel regression; cancer; vascularised solid tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                  GCAITCITCIGAGCACTGITTATACACTGICIAAATACCCATATGICCT 2276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis of cancer, especially vascularised solid tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 3; Length 2269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
99.4%; Score 2269; D
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2269; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                           Human angiopoietin-2 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 283; 298pp; English.
                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0131432P
                                                                                                                                                                                                                        DNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-APR-2000; 2000WO-US011367
                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brekken RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-687317/67.
P-PSDB; AAB28392.
                                                                                                                                                                                                                        AAC67774 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                            WO200064946-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                Ното варіеня
                                                                                                                                                                                                                                                                                19-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thorpe PE,
                                                                 2168
                                                                                          2161
                                                                                                                      2228
                                                                                                                                                 2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
        2108
                                   2101
                                                                                                                                                                                                                                                    AAC67774;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                          RESULT
AAC6777
```

a ઠ

ઠે

us-10-603-293-5.rng

ð 셤 ò 셤 à 셤 ò 유 Š ద ઠે 요 ò 셤 ò g ð g ò ద ò g à 요 ò 8 ò q ò 엄 ò g δ g ò ద

```
P-PSDB, ABG06771
                                                                                                                                                                                                        WO200175067-A2
                                                                                                                                                                              Homo sapiens.
                                                                                13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                            Drmanac RT,
                                                                                                                                                                                                                                   11-OCT-2001.
                                                      AAS70958;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
            AAS70958
 RESULT
                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                1320
                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                                                                           1387
                                                                                                                                      1380
                                                                                                                                                                 1447
                                                                                                                                                                                                                       1507
                                                                                                                                                                                                                                                                            1567
                                                                                                                                                                                                                                                                                                                                  1627
                                                                                                                                                                                                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                                                                                                                                            1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2100
                                                                                                                                                                                          1500
                                                                                                                                                                                                                                                                                                    CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1560
                                                                                                                                                                                                                                                                                                                                                                                       1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGCCACAACCATGATGGTCCGACCAGCAGATTTCTAAAACATCCCAGTCCACTGAGG 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC 2047
                                                                                                                                                                                                                                     1441 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                CACAAAGGATGGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AACTGTCTCGAACTATTTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTGTCCTCTTCCACCACCACAGGGGGTGTGCTCGGTGTTGCTGACGGGACCCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTAAACATCCATAATTGTGGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
 TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                    Tectigaagtattcaaatcaggacacaccacaaatggcatctacacgttaacattccctaa
                                                     .261 Trcracagaagagarcaaggccracrgracargaaagcrggaggaggaggagagacaar
                                                                                                          TATTCAGCGACGTGAGGATGGCGGTTGATTTTCAGAGGACTTGGAAAGAATATAAAAGT
                                                                                                                                     1321 TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                            CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                                                                                                                                 AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                      CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAAACATCCCAGTCCACCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTGTCCTCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2101 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
                                                                                                           1328
1208
                         1201
                                                     1268
                                                                                                                                                                1388
                                                                                                                                                                                                                     1448
                                                                                                                                                                                                                                                                          1508
                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                 1568
                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                                                                                                                                                                                                                                                                                                                      1628
                                                                                                                                                                                                                                                                                                                                                                                                                 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                              1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1988
```

```
The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed converted in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful in an tibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating disorders of sites expressing (II). (I) and (II) are useful for treating disorders of olypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations capped to produce other types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic conding sequences. AAS64197-AAS94564 represent novel human diagnostic patent did not appear in the printed specification, but was obtained in patent conditions of product dependent on DNA and patent did not appear in the printed specification, but was obtained in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGGGTTGGTGTTTATCTCCCCCCAGCCTTGAGGAGGGAACAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 AGAGAGGACCAGGGACGGGGAAAGCTGCTGTAAAAGGCTGACAGGCCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                              Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 5; Length 2269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                      DNA encoding novel human diagnostic protein #6762.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.4%; Score 2269; I
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 6762; 103pp; English.
BP.
    AAS70958 standard; cDNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-MAR-2001; 2001WO-US008631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 100.
Matches 2269; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-639362/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HYSE-) HYSEQ INC.
```

ö

```
68
                      g
                                                                                  셤
                                                                                                                   à
                                                                                                                                              셤
                                                                                                                                                                                ò
                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ОĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a gene expression profile comprising one or more genes (ABZ34889-ABZ35692) and generated from a cell type. The cell type is a coronary artery endothelium, umbilical artery or vein endothelium, dermal microvascular endothelium, pulmonary artery endothelium, mammary epithelium, prostate endothelium, myometrium microvascular endothelium, prostate endothelium, prostate epithelium, prostate epithelium, renal proximal tubule epithelium, cepithelium, renal epithelium, renal proximal tubule epithelium, cepithelium, renal fibroblast, pulmonary artery smooth muscle, dermal fibroblast, pulmonary artery smooth muscle, control muscle, mesangial cells, skeletal muscle, astrocytes, cortic smooth muscle, mesangial cells, coronary artery smooth muscle, cortic smooth muscle, ung fibroblast, coreacy artery smooth muscle, cortic smooth muscle, userine smooth muscle, lung fibroblast, cortic action muscle, used action of cortic action of the smooth muscle, used and distinguishing cell types. The gene or a profeting expression profile is useful in identifying disease pathologies involving alterations of gene expression. The assessment of expression profile may also be used for creating microarrays. The microarray is useful for genetic and physical mapping of genomes, DNA sequencing, genetic or may also be used for creating microarrays. The microarray is useful for medical diagnosis, genotyping of genomes, confirming cell types.
                                                                                                                                                             Human; artery; endothelium; umbilical; vein; aorta; pulmonary artery;
bronchial epithelium; prostate; muscle; lung fibroblast; osteoblast;
tumour; microarray; genome mapping; antibiotic; antiviral; antifungal;
gene expression; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New gene expression profile generated from primary, endothelial, epithelial, and muscle cell types, useful for identifying disease pathologies involving alterations of gene expression, e.g. cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 2269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                     Human gene expression profile polynucleotide SEQ ID NO 460.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.4%; Score 2269; DB 6; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; Page 609-610; 850pp; English
                                                                                                                                                                                                                                                                                                                                                                                              (ORTH ) ORTHO CLINICAL DIAGNOSTICS INC.
                                          ABZ35349 standard; cDNA; 2269
                                                                                                                                                                                                                                                                                                                                     20-MAR-2002; 2002WO-US008456
                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2001; 2001US-0276947P.
                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-740862/80.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antifungal agents
                                                                                                                                                                                                                                                                                                                                                                                                                              Wan J, Wang Y;
                                                                                                                                                                                                                                                                         WO200274979-A2
                                                                                                       05-FEB-2003
                                                                                                                                                                                                                                              Homo sapiens
                                                                         ABZ35349;
            RESULT 8
```

```
1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1087
                      AGAGAAGAACAAAAGGACCGTGAAAAGCTGCTCTGTAAAAAGCTGACACAGGCCTCCCCAAGTG 120
                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG 127
                                                                          187
                                                                                                                                                                                                                                307
                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                          367
                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAACTACAGTCAATAAAAGAAGAAGAACAATCAGCTACAGGTGTTAGTATCCAAGAAAA
                                                                            AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                      CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAAGAGAAGAAGTTTCATTGACGGACC
                                                                                                                                                                              CAGTAAAAACCAGGTTTGCTACTGGAAAAAGGGGAAAGAGAAAAAGAGATACTTTCATTGACGGACC
                                                                                                                                                                                                                                                        CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                            GIGITTIGCCCTCAAGITTIGCTAAGCTGCTGTTTATTTACTGAAGAAAGAATGTGGCCAGAT
                                                                                                                                                                                                                                                                                                                                GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGCAGAGGACGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAACTACAGTCAATAAAAGAAGAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1148 ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCAGAGGGACGCGCCCCCCAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCCATCATTGAAGAACTAGAAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021 TICCATCATIGAAGAACTAGAAAAAAAAAAAGIGACTGCCACGGTGAATAATICAGTICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC
                                      61
                                                                                                                121
                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1088
                                                                            128
                                                                                                                                                      188
                                                                                                                                                                                            181
                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                        368
                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

;

Indels

ö

Local Similarity

Best Local Sim Matches 2269;

d

TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGAACAACACTGTAGGATCTGGGG

셤 ò 중 음 중

ద ઠે 셤 ò 셤 Š 셤 δ

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2220
                                                                                      1320
                                                                                                         1387
                                                                                                                            1380
                                                                                                                                                                                                                                                                 1627
                                                                                                                                                                                                                                                                                                        1687
                                                                                                                                                                                                                                                                                                                                                                                                                         1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1987
1381 GGGATTIGGTAACCCTICAGGAGAATATTGGCTGGGAAATGAGTTIGTTICGCAACTGAC 1440
                                                                                                                                                                                     TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507
                                                                                                                                                                                                        1441 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1500
                                                                                                                                                                                                                           CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA 1567
                                                                                                                                                                                                                                             CICATIGIAIGAACAITICIAICICICAAGIGAAGAACICAAITAIAGGAITCACCITAA 1560
                                                                                                                                                                                                                                                                                   1561 AGGACTTACAGGGACAGCCGGCAAATAAGCAGCATCAGCCAACCAGGAATGATTTTAG 1620
                              TGCTGAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAACATTCCCTAA 1267
                                                                   TICIACAGAAGAGAICAAGGCCIACTGIGACAIGGAAGCIGGAGGAGGAGGAGGACAAT 1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACACAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                              CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGAGG
                                                                                                                                                                                                                                                                                                                                                       CTGTGTCCTCCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccraaacarccaraarragacraaacaccrargcaaagargaacccaaggcrga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                           TATTCAGCGACGTGAGGATGGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                 AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTAG
                                                                                                                                                                                                                                                                                                        CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                             CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                   GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                              CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAAGAATGTTATGTGCAAGTTT
                                                                                                                                               TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2161
                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                 1681
                                                                                                                                                                                                                                                                                                                                                                                    1748
                                                                                                                                                                                                                                                                                                                                                                                                        1741
                                                                                                                                                                                                                                                                                                                                                                                                                           1808
                                                                                                                                                                                                                                                                                                                                                                                                                                              1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2228
                                                  1201
                                                                     1268
                                                                                                           1328
                                                                                                                                                                                       1448
                                                                                                                                                                                                                             1508
                                                                                                                                                                                                                                                                    1568
                                                                                                                                                                                                                                                                                                          1628
                                                                                                                                                                                                                                                                                                                                               1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1921
             1141
                               1208
                                                                                      1261
                                                                                                                              1321
                                                                                                                                                 1388
                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

ઠે

δ

ઠે

```
Human; immunoconjugate; anti-vascular endothelial growth factor antibody; anti-VEGF antibody; monoclonal antibody 2C3 ATCC PTA 1555; VEGF receptor; VEGFR2; VEDFP11-1; VEGFR2; NET-11, VEGFR2; NET-11 vEGFR2; NET-11 vEGFR2; NET-11 vEGFR2; VEGFR2; NECLAIR degeneration; cocular neovascular disease; cancer; vascularised solid tumour; AIDS; metastatic tumour; endothelial cell proliferation; inflammatory disorder; actheroselerosis; diabetic retinopathy; corneal graft rejection; acquired immune deficiency syndrome; infection; restenosis; fungal ulcer; sickle cell anaemia; endometriosis; anglopoietin-2; gene; ds.
2221 GCATTCTTCTGAGCACTGTTATACACTGTGTAAATACCCATATGTCCT 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA encoding human angiopoietin-2.
                                                                                                                                                                                                                                                                                 ABK47716 standard; DNA;-2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-JUL-2002
```

Location/Qualifiers

/product= "Angiopoietin-2" 350. .1840 /\*tag= a AU200179401-A.

06-DEC-2001.

12-OCT-2001; 2001AU-00079401

28-APR-2000; 2000AU-00048049

(TEXA ) UNIV TEXAS SYSTEM. Brekken RA; Thorpe PE,

WPI; 2002-281368/33. P-PSDB; AAU77944. Immunoconjugate compositions for treating cancer by inhibiting angiogenesis and for delivering a diagnostic agent to tumor, comprises anti-vascular endothelial growth factor antibody attached to a biological

Disclosure; Page 4 (Sequence listing); 299pp; English

The present invention relates to antibody-based compositions comprising an immunoconjugate such as anti-vascular endothelial growth factor (VEGF) antibody (Ab) (or its antigen-binding fragment), atteached to a biological agent, where the Ab binds to the same epitope as the monoclonal antibody (MAD) 203 ATCC PTA 1595, and significantly inhibits VEGF binding to the VEGF receptor VEGFRI (RDK/FIk-I) without inhibiting VEGF binding to the VEGF receptor VEGFRI (RDK/FIk-I) without inhibiting vEGF binding to the VEGF receptor VEGFRI (FIL-I). The compositions of the invention are useful in therapy, and diagnosis of confidenting anglogenesis in an animal having ocular neovascular disease or macular degeneration, and for can also be used for treating abological agent to a vascularised solid tumour, a metastatic tumour. The composition is useful for specifically inhibiting vEGF-induced endothelial cell proliferation, without significantly inhibiting vEGF-induced macrophage, osteoclast or chondroclast function. The compositions can be used for treating various diabetic retinopathy confinitions can be used for treating various diabetic retinopathy as cumours, corneal graft rejection, Grobin's diseases such as inflammatory disorders, atherosolerosis, diabetic retinopathy confinitions, and endometriosis. The present sequence encodes human angiopoietin-2 Angiopoietin-2 may be attached or functionally associated with anti-VEGF antibodies

```
8
                                                                                                                                                          68
                                                                                                                                                                                61
                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                       128
                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                           368
                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
SSSSS
                                                                                                                                g
                                                                                                                                                          ò
                                                                                                                                                                               d
                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                              ò
                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                   ઠે
                                 2160
                                                        2227
                                                                             2220
                                                                                                                                                                                                                                                                         Cytostatic; vasodilator; antiinflammatory; cardiant; gene therapy; ligand-receptor binding modulator; ephrin ligand; angiogenesis; lymphangiogenesis; aberrant Ephrin-Tie biology; cell growth disorder; cell migration disorder; cell proliferation disorder; neovascularisation; ischaemia; infarction; tissue graft; transplant; tie receptor tyrosine kinase; angiopoietin 2; ang-2; human; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ephrin-
that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying modulators of binding between a Tie receptor tyrosine kinase and an Ephrin ligand, useful for promoting necvascularization, comprises contacting a Tie receptor with an Ephrin in the presence of a putative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention describes a method of identifying a modulator of binding between a Tie receptor tyrosine kinase and an Ephrin ligand. The method comprises contacting a Tie receptor composition with an Ephrin composition in the presence and in the absence of a putative modulator compound, and detecting the binding between Tie receptor and the Ephrin in the presence and in the absence of the putative modulator. The method is useful for identifying a modulator of binding between a Tie receptor tyrosine kinase and an Ephrin ligand. Modulators identified from the
                       GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                             Arcagraanaacrogaaaacagaacacrrargrrargaararacagarcarcragaacr
                                                        ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   method are useful in modulating angiogenic processes, including typphangiogenesis, for treating diseases associated with aberrant Tie biology, aberrant growth, migration or proliferation of cells express a Tie receptor, or for promoting growth of vessel or
                                                                                                                 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2269
                                                                                                    GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
                                                                                                                                                                                                                                                      (Ang-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Page 183-186; 199pp; English.
             GAATCAGACTGACAGTTTACAGACGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                             350. .1840
/*tag= a
/product= "Ang-2"
/note= "Angiopoietin
                                                                                                                                                                                                                                                      cDNA encoding human angiopoietin 2
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                  BP
                                                                                                                                                                                   CDNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-JUL-2002; 2002WO-IB002524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-JUL-2001; 2001US-0302960P.
                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (LICN ) LICENTIA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-210341/20.
P-PSDB; ABU07855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kubo H;
                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003004529-A2
                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alitalo K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modulator
                                  2101
                                                                             2161
                                                                                                     2228
                                                         2168
                                                                                                                           2221
                                                                                                                                                                                   ABX12556
                                                                                                                                                                                                          ABX12556;
             2108
                                                                                                                                                                                                                                                                                                                                                             Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                             RESULT
                                                                                                                                                                                   셤
                                                                           셤
                                                                                                                          유
             ठ
                                                         ઠે
                                                                                                    ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     847
                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                       encodes
                                                                                                                                                                                                                                                                                                                        127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCCTCCCAAGTG 120
                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               renecadadedececececredanacandacredenedadedecededadece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601 GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAAGAAAGAAATGGTAGAGATACAGCAGAAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCTCGACAAACAAATTGGAAAAAACAGATTTTTGGACCAGACCAGGACAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         neovascularisation (e.g. ischaemic tissue, an infarction, a new or chronic compound, or a tissue graft or transplant). This sequence encohuman angiopoietin 2 (ang-2), a Tie-2 tyrosine receptor kinase ligand
                                                                                                                                                                                                                                                                           reserrestratererecesecerreassassassaseaseaseaseaseareressaseareresses
                                                                                                                                                                                                                                                                                                                      AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTTAAAAGCTGACACACCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                AGCAGGACTGTTCCTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grerrrececreaserrrecrasecrecrestrarracreaseaseaserecesear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                  ó,
                                                                                                                                        8; Length 2269;
                                                                                        Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other
                                                                                                                                                                                     Indels
                                                                                                                                                                                     ö
                                                                                                                                        ВВ
                                                                                                                                   Query Match
99.4%; Score 2269; I
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2269; Conservative 0; Mismatches
```

```
Petrova T, Saharinen P,
                                                                                                                                                                                                                                            Human BEC/LEC-related gene sequence SeqID303.
                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                       (LUDW-) LUDWIG INST CANCER RES
                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAR-2002; 2002US-0363019P.
                                                                                                                                                                                 ADN95380 standard; DNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                               07-MAR-2003; 2003WO-US006900.
                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alitalo K, Makinen T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) LICENTIA LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2003-876899/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; ADN95379
                                                                                                                                                                                                                                                                                                                                                         WO2003080640-A1.
                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                        01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                            02-OCT-2003.
                                                2101
                                                                    2168
                                                                                                             2228
                                                                                                                                                                                                      ADN95380;
                             2108
         2041
                                                                                                                                                                                                                                                                                                                   human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  LICN
                                                                                                                                                              RESULT 11
                                                                                                                                                                         ADN95380
                                           g
                                                               ò
                                                                                     g
                                                                                                             Š
                                                                                                                          g
                                                                                                                                                                                  셤
                            Š
                                                                                                                                          1200
                                                                                                                                                              1267
                                                                                                                                                                                 1260
                                                                                                                                                                                                                         1320
                                                                                                                                                                                                                                            1387
                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                        1440
                                                                                                                                                                                                                                                                                                                                                                                      1560
                                                                                                                                                                                                                                                                                                                                                                                                                              1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2047
                                                                               1147
                                                                                                                      1207
                                                                                                                                                                                                      1327
                                                                                                                                                                                                                                                                                   1447
                                                                                                                                                                                                                                                                                                                            1507
                                                                                                                                                                                                                                                                                                                                                                  1567
                                                                                                                                                                                                                                                                                                                                                                                                           1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2040
                                       1087
                                                                                                                                                                                                                                                                                                                                               1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1980
                                                                                                                                     TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                   CTCATTGTATGAACATTTCTATCTCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                      CACAAAGGATGGAGACAACGACAAATGTATTTGCAAAATGTTCACAAATGCTAACAGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGGAC
                   ccaactacagtcaataaaagaagaaagatcagctacaggtgttagtatccaagcaaaa
                                                                               TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC
                                                                                                   TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC
                                                                                                                      ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                             TGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                      TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGGTGGAGGAGGGGGGTGGACAAT
                                                                                                                                                                                                                 TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                         TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                               1441 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                           AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGGCCACACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTGTCCTCTTCCACCACAGAGGGCGTGTGCTCGTGCTGACGGGAACCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTGTCTCTTCCACCACACAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                          TTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                   CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                       TTCCATCATTGAAGAACTAGAAAAAAAAAAAAGTGACGGCGACGGTGAATAATTCAGTTCT
                                                           1021
                                                                               1088
                                                                                                   1081
                                                                                                                       1148
                                                                                                                                                              1208
                                                                                                                                                                                  1201
                                                                                                                                                                                                      1268
                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                             1328
                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                    1388
                                                                                                                                                                                                                                                                                                                            1448
                                                                                                                                                                                                                                                                                                                                                                   1508
                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                                                                           1568
                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1988
                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1928
968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1748
              셤
                                                    g
                                                                                               g
                                                                                                                                    요
                                                                                                                                                            Š
                                                                                                                                                                            8 S
                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
ઠે
                                       ò
                                                                            ò
                                                                                                                     ਨੇ
```

```
2100
                                                                                                                                                                2160
2107
                                                                                                          2167
                                     GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                           2161 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
  CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                             GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                          ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                                                 2221 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAAATACCCGTATGTCCT 2269
                                                                                                                                                                                                                                                                                                                                    GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
  2048
```

Iymphatic endothelial cell; LEC; hereditary lymphoedema; VEGFR-3; lymphatic growth agent; VEGF-C; VEGF-D; antiangiogenic; cytostatic; vasotropic; antiinflammatory; gene therapy; endothelial cell disorder; inflammatory disease; cancer metastasis; lymphatic system; gene; ds; differentiation; blood endothelial cell; BEC;

Example 1; SEQ ID NO 303; 176pp; English.

Saharinen J;

This invention relates to a method of differentially modulating the growth or differentiation of blood endothelial cells (BEC) or lymphatic endothelial cells with a composition comprising an agent that differentially modulates blood or lymphatic endothelial cells with a man subject with lymphoedema and with a mutation in at least one allele of a gene encoding a BCC protein, where the mutation correlates with lymphoedema in human subjects, and with the proviso that the LEC protein is not VEGFR-3; and administering to the subject a composition comprising a lymphatic growth agent selected from VEGF-C or VEGF-D polypeptides and polymucleotides. The invention may be useful for the development of compounds with an antiangiogenic, cytostatic, vasotropic or antiinflammatory activity or for gene therapy. The method is useful in modulating the growth or differentiation of blood endothelial cells or lymphatic endothelial cells, in treating hereditary lymphoedema, in screening for an endothelial cells, in treating hereditary lymphoedema, in screening for an endothelial cells, in modulating an endothelial cells or lymphatic and polymphatic and polymphatic and conditions of a drug on endothelial cells. The agent is useful in manifacturing a medicament for the differential modulation of blood vessel endothelial

```
8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ୍ପ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                          g
                                                                               셤
                                                                                                                   ద
                                                                                                                                         ð
                                                                                                                                                        요
                                                                                                                                                                                           g
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                           ⋧
                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                               Š
                                                                                                    ઠ
                                                                                                                                                                       8
                             ઠે
cell or lymphatic vessel endothelial cell growth or differentiation. The lymphatic growth agent may also be used in manufacturing a medicament for the treatment of hereditary lymphoedema resulting from a mutation in a LEC gene or of other diseases involving the lymphatic vessels, such as various inflammatory diseases and cancer metastasis via the lymphatic system. The present sequence is that of a human LEC/BEC differentially expressed gene which is related to the method of the invention.Note: This sequence does not appear in the specification but was obtained by the indexer using the source data given in table 14 of the specification.
                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                          547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                      AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAAGTG 127
                                                                                                                                                                                                          120
                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                           367
                                                                                                                                                                                                                                                                                                                                                                                                                     487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT 907
                                                                                                                                                                     9
                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAGAAATAGGGACAAAACCTGTTGAACCAAACAGCTGAGCAAACGGGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAGAAATAGGGACAAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                             AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                  CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                             CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTCGGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                            GIGITIGCCCTCAAGTITGCTAAGCTGCTTGATTACTGAAGAAAGAATGTGGCCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCATGGACAGCATAGGAAAGAAGAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCAGAGCCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGCTGTGAT
                                                                                                                                                   TGGCTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                   Gaps
                                                                                                                                  ö
                                                                                                               99.4%; Score 2269; DB 11; Length 2269;
                                                                                            Sequence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                  0; Indels
                                                                                                                          ö
                                                                                                                                 0; Mismatches
                                                                                                                         Pred. No.
                                                                                                                        Best Local Similarity 100.0%; Matches 2269; Conservative 0
                                                                                                                                                     œ
                                                                                                                                                                                         68
                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                   188
                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       348
                                                                                                                Query Match
                                                                                                                                                                                                            61
                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                            308
                                                                                                                                                                                                                                                                                                                                                                                 368
                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                      428
                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                            488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                    중 음
                                                                                                                                                                                                                                                                                                                                                          පු
                                                                                                                                                                                                                                                                                                                                                                                8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                    요 상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 S
  셤
                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                     ઠ
                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                             ò
```

1260 1387 1620 1680 1747 1740 1807 1800 1080 1147 1140 1207 1200 1267 1380 1447 1507 1567 1687 1867 1987 1087 AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTAG 1627 900 967 CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG CTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA ATCAAACTCAGCTAAGGACCCCACTGTTAAGAAGAACAAATCAGCTTCAGAGACTG TGCTGAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAACATTCCCTAA CTGTGTCCTCTTCCACCACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCCAC TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT TATTCAGCGACGTGAGGATGCGCGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT TATTCAGCGACGTGAGGATGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1508 1088 1081 1148 1141 1208 1268 1261 1328 1321 1388 1381 1448 1501 1568 1561 1628 1621 1688 1681 1748 1741 1808 1801 1868 1861 1928 908

```
Sequence 2269
                                                                                                                                                                                                                                                                                                 89
                                                                                                                                                                                                                        œ
                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        908
    8886666
                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                      2107
                                                                                                                                                          2100
                                                                                                                                                                                                 2167
                                                                                                                                                                                                                                        2160
                                                                                                                                                                                                                                                                               2227
                                                                                                                                                                                                                                                                                                                 2220
    CTGTGTCCTCTTCCACCACACAGGCGTGTGCTCGGTGCTGACGGGACCCCACATGCTCCA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for detecting high-grade dysplasia (HGD) in cells of a mammalian tissue sample. Also described: (1) identifying an oesophageal tissue susceptible to oesophageal adenocarcinoma; (2) determining the predisposition of a mammalian tissue to a neo-plastic transformation by detecting HGD in cells of the tissue; and (3) detecting cancer in a patient. The method can be used in detecting HGD and cancer in cells of a mammalian tissue sample. The methods and compositions of the present invention can be used in treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting of high-grade dysplasia in cells of a mammalian tissue sample comprises establishing the level of expression in the test tissue sample of the genes.
                                                           GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                                                2041 CCTAAACATCCATAATTGTGATTAGACAGAACACCCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                                        2101 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAACGAAGAATGTTATGTGCCAAGTTT
                                                                                                                                                                                                                                                                                                     ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                               ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                        GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                    CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                 GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    high-grade dysplasia; HGD; oesophageal adenocarcinoma;
neo-plastic transformation; cancer; cytostatic; gene therapy; human;
Tie2 ligand2; chromosome 8; gene; 8s.
                                                                                                                                                                                                                                                                                                                                                                                             2269
                                                                                                                                                                                                                                                                                                                                                        GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
                                                                                                                                                                                                                                                                                                                                                                             GCATICTICTGAGCACTGTTATACACTGTGTAAATACCCATATGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human Tie2 ligand2 encoding cDNA SEQ ID NO:103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
350. .1840
/*tag= a
/product= "Tie2 ligand2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 37; SEQ ID NO 103; 256pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-NOV-2003; 2003WO-US036260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-NOV-2002; 2002US-0425813P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2004-420319/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO28674 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AD028675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004044178-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAY-2004
  1921
                                                                               1981
                                                                                                                    2048
                                                                                                                                                                                                 2108
                                                                                                                                                                                                                                                                           2168
                                                                                                                                                                                                                                                                                                                 2161
                                                                                                                                                                                                                                                                                                                                                        2228
                                                                                                                                                                                                                                                                                                                                                                                             2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AD028674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Smith V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
ADO28674
ID ADO28674
ID ADO28674
XX ADO28674
DT 12-AU
XX HUMAN
XX HOMO-
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
유
                                      ò
                                                                       셤
                                                                                                          8
                                                                                                                                                g
                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                     용
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           547
                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCCTCCCAAGTG 120
and preventing HGD and cancer, and in gene therapy. The present sequence encodes human Tie2 ligand2, which is used in the exemplification of the present invention. The human Tie2 ligand2 gene is located on chromosome 8.
                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                           AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACCCTCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 CAGTAAAACCAGGTTTGCTACTGGAAAAGAGGAAAGAGAAGAGAACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGCAGAGGGACGCGCCCCCCCCGATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAGAAATTAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGGGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGTTGGTTTTATCTCCTCCCAGCCTTGAGGGAACAACACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCAGCTCGGGACTTTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            reregaagcccaagrarraaarcagaccacgagacrrgaacrrcagcrcrrggaacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAGAGAAAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGCATGGACATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGCAGAGGGACGCCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                               Query Match 99.4%; Score 2269; DB 12; Length 2269;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2269; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                    BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
```

```
Location/Qualifiers
                                                                                                                                                                                                                                                                                               ΗB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-DEC-2002; 2002US-00317803.
                                                                                                                                                                                                                                                                                               ADQ09385 standard; DNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-DEC-2002; 2002US-00317803
                                                                                                                                                                                                                                                                                                                                                                                     Human Angiopoietin-2 DNA #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350. .1840
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/product= '
                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-449380/42.
P-PSDB; ADQ09610.
GENBANK; AF004327.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Myers K, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004115640-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                           09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-2004
                                                                                                                                                                                                                                                                                                                              ADQ09385;
                                                                       2108
               2048
                                                                                                                                                                                                                                                                  RESULT 13
ADQ09385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                g
                                                                                            g
                                                                                                                                                                                      ò
                                   셤
                                                                       8
                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG 1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTGTCCTCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA 1987
                                                                                                                                                 1147
                                                                                                                                                                                                                                                                                                                               1327
                                                                                                                                                                                                                                                                                                                                                                                          1387
                                                                                                                                                                                                                                                                                                                                                                                                                      1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG 1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CIGGIGGITIGAIGCAIGIGGICCTICCAACTIGAACGGAAIGIACTAICCACAGAGGCA 1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACTTACAGGGACAGCCGCCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTAG 1627
                                           GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT
                                                                                                                                                                                                                                                                                                                                               GGGATTIGGTAACCCTTCAGGAGAATATIGGCTGGGAAATGATTTGTTTCGCAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                     1021 TTCCATCATTGAAGAACTAGAAAAAAAAAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                  TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC
                                                                                                                                                                                                          ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                                                     TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                                                                                                          gecarrrecra accerre de de la company de la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTGGGAAAGGGAATGAGGCTTA
                                                                                        TTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1988
                                                             196
                                                                                                                                                                                1081
                                                                                                                                                                                                             1148
                                                                                                                                                                                                                                                                                                                                                                                             1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1981
                                                                                           1028
                                                                                                                                                    1088
                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                        1208
                                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                  1268
                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                896
    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
상
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                             g
                                                                                                                                                                         d
                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                ò
                                                         셤
                                                                                        ઠે
                                                                                                                                                  ઠ
                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                     8
```

```
2107
                                                                       2100
                                                                                                                                              2167
                                                                                                                                                                                                                     2160
                                                                                                                                                                                                                                                                                         2227
                                                                                                                                                                                                                                                                                                                                                                2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding the human Angiopoietin-2 polypeptide. The compound is an antisense oligonuclectide that specifically hypridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage it. e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethy! sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the human Angiopoietin-2 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents DNA encoding a human Angiopoietin-2 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligonucleotide compound that inhibits expression of Angiopoietin-2, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                  2161 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCCACTTGGAACT
                                         2168 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATTGGAACT
           CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                  GAATCAGACTGACAGTTTACAGACGCTGTCTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, Angiopoietin-2; gene; ds; antisense oligonucleotide;
phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety;
5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                       "Human Angiopoietin-2 #1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 18; 102pp; English.
```

10.28   TCCALCTACTACTACTACTACACACACACACACACACCACCACACACACACACACACAC
B & B & B & B & B & B & B & B & B & B &
Sequence 2269 BP; 742 A; 455 C; 516 G; 514 T; 0 U; 0 Other;

us-10-603-293-5.rng

유

원 ò

8

```
Similarity
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simil
Matches 2269; (
                                                                                                                                                                                                                            encoding
                                                                                                                                                                                                                                                                                                                                                                                                          œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a pharmaceutical composition comprising a pharmaceutical carrier and an amount of an extracellular matrix (ECM)-
binding fragment of angiopoletin (Ang)-1 protein or a mutant Ang-1. Also provided are methods of treating an individual suspected of having coronary artery disease, vascular disease or a condition involving coronary artery disease, vascular disease or a condition involving ischaemia, of promoting angiogenesis, endothelial survival and maintaining vascular integrity in an individual; of treating an individual suspected of having a disease related to lack of blood vessels to effectively promote angiogenesis in the patients with the diseases or creduce stroke, heart attack, blood vessel blockage, haemorrhage, artherosclerosis risk by maintaining the health and integrity of blood vessels; to assist the recovery of the patients who had stroke and the angioplasty procedure by promoting the growth/survival of endothelial calls and establish endothelial monolayer and inhibit excessive inflammation, haemorrhage, and proliferation of vascular smooth muscle;
                       2167
                                                                 2160
                                                                                                              2227
                                                                                                                                                           2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New pharmaceutical composition comprises a pharmaceutical carrier and an amount of an extracellular matrix (ECM)-binding fragment of Ang-1 protein or a mutent Ang-1, useful for treating, e.g. cancer, vascular disease, or ischemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; vasotropic; antiangiogenic;
                                                                                                                                                           ATCAGTAAATAACTGGAAAACAGAACACTTATATTACAATACAGATCATCTTGGAACT
                       GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                 GAATCAGACTGAGAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                              ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                               GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ang-1; extracellular matrix; ECM; anglopoletin;
antidiabetic; antiarthritic; cerebroprotective;
gene therapy; human; gene; Ang-2; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                matrix; ECM; angiopoietin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human angiopoietin-2 (Ang-2) encoding DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 33; 114pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
350. .1840
/*tag= a
/product= "Ang-2"
                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-FEB-2003; 2003US-0450582P
                                                                                                                                                                                                                                                                                                                                                                  DNA; 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-FEB-2004; 2004WO-US006101
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYPE-) UNIV PENNSYLVANIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-653413/63
                                                                                                                                                                                                                                                                                                                                                                  ADS13801 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; ADS13783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004076650-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-SEP-2004
                                                                    2101
                                                                                                                                                           2161
                         2108
                                                                                                                2168
                                                                                                                                                                                                         2228
                                                                                                                                                                                                                                                    2221
                                                                                                                                                                                                                                                                                                                                                                                                               ADS13801;
                                                                                                                                                                                                                                                                                                                      RESULT 14
ADS13801
ID ADS13
XX
XX
ADS13801
ADS13
XX
ADS13801
DE Human
XX
ADS13
AD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
```

```
to treat patients with restenosis by inhibiting re-closure of blood vessel after inserting stents into blood vessels; to make stable and functional artificial blood vessels comprising using the composition above; of identifying compounds that modulates binding of Ang-1 to ECM; of treating an individual suspected of having cancer; of preventing diabetes and/or arthritis in an individual suspected of being at risk of developing diabetes or arthritis. The pharmaceutical composition is useful for treating diseases and disorders, e.g. cancer, coronary artery disease, vascular disease, ischaemia, restenosis, diabetes, stroke, angiogenesis, or arthritis. The present sequence represents the human Ang
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 TGGGTTGGTGTTTATCTCCCCCCAGCCTTGAGGAGGAACAACACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAGGACTGTTCCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 Accadeacrerrecracrecarrecarreracrerrecrecarecresers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTGGGGAGCTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          retritcittacicidageigidaterigicitgeceecaecetataacaacitreegaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGCAGAGGGACGCGCCCGCTCGATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGAGACTTTCATTGACGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGCAGAGGGACGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                         Length 2269;
                                                                                                                                                                                                                                                                                          Seguence 2269 BP; 742 A; 495 C; 518 G; 514 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                           DB 13;
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                      99.4%; Score 2269; Interity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

840

781

셤

요 요

 g G

ò a

8 6

ò

음 장

g &

엄

중 음

8 6 8 6

8 B 8

8 8

8 &

음 상 음

```
2040
                                                                                                                                    2107
                                                                                                                                                                                                                                         2160
                                                                                                                                                                                                        2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention relates to a combination comprising several cDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed cDNAs in a sample. The CDNAs of the invention may have antiarteriosclerotic; cytostatic; cardiant; hypotensive; antidiabetic; gynaecological; vasotroppic and cerebroprotective activities and may be used in gene therapy. The cDNAs of the invention may be used in a high-throughput methods for detecting differential expression of one or more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, gene, ss; vascular tissue, cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
CTGTGTCCTCCTCCACACACAGGGGGGGTGTGCTCGTGCTGACGGGACCCACATGCTCCA
                     CTGTGTCCTCCTCCACCACAGAGGGGGTGTGTCTCGGTGACGGGACCCACATGCTCCA
                                                                   GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC
                                                                                       GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAAACGACCAAGGAAGAAC
                                                                                                                                                       GAATCAGACTGACAGTTTACAGACGCTGCTGCTGTCACAACCAAGATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                             CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                                                                                                                                                                                         GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                           ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cDNA #23 differentially expressed in activated vascular tissue
                                                                                                                                                                                                                                                                                                                                            GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT
                                                                                                                                                                                                                                                                                                                                                               GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX63023 standard; cDNA; 2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-2000; 2000US-0222469P.
08-JAN-2001; 2001US-0260483P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JAN-2002; 2002US-00044090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page; 18pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-110597/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2002137081-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BAND/) BANDMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vascular tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bandman 0;
                                 1921
                                                                                                                                                                                                                                         2101
                                                                                                                                                                                                                                                                           2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX63023;
 1928
                                                                   1988
                                                                                                    1981
                                                                                                                                     2048
                                                                                                                                                                                                         2108
                                                                                                                                                                                                                                                                                                                                               2228
                                                                                                                                                                                                                                                                                                             2161
                                                                                                                                                                                                                                                                                                                                                                               2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                         à
                                                                                                                                                              qq
                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1740
                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                             1147
                                                                                                                                                                                                                                                                                                                                                                                                1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1687
                                                                                                                                                       1027
                                                                                                                                                                                                                           1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1920
                                                  900
                                                                                   967
                                                                                                                    960
                                                                                                                                                                                                                                             TTCCATCATTGAAGAACTAGAAAAAAAAAAAAGTGACTGCCACGGTGAATAATTCCATCT
                                                                                                                                                                                                                                                                                                                   ATCAAACTCAGCTAAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTCAGCGACGTGGGGGGGGGGTGGTTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCAA
                                     CCTCTCGACAAACAAATTGGAAAAACAGATTTTTGGACCAGACCAGTGAAATAAACAAATT
                                                                                                                    CCAACTACAGTCAATAAAAGAAGAAGAACATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                         CCAACTACAGTCAATAAAAGAAGAAGAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA
                                                                                                                                                                                                                                                                                                                                                               ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACACAAATAAGTTCAACGCCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG
                                                                                   TICCATCATIGAAGAACTAGAAAAAAAAAAAAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                           1028
                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                             1088
                                                                                                                                                                                                                                                                                                                                                               1148
                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                 1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1808
                                                                                                                    901
                                                                                                                                                       968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1861
                                                  841
                                                                                   908
                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1868
```

identify a molecule or compound that specifically binds a cDNA of the invention. A protein encoded by the cDNA may be used to screen several molecules or compounds to identify a ligad that specifically binds to the cubes or compounds to identify a ligad that specifically binds to the protein, or to produce or purify a ligad that specifically binds to the protein, or to produce or purify a ligad that protein that can be used to detect a protein in a sample or purify a natural or recombinant protein from a sample. The nucleotides may be useful for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, cancer, coronary artery classase, hypertension, diabetes, pre-eclampsis, ischaemia- reperfusion injury, restenosis, or stroke. The cDNAs can also be used for large-scale genetic or gene expression analysis of several new nucleic acid molecules. Antibodies to the proteins encoded by the cDNAs are useful for diagnosing pre-pathologic disorders, and chronic or acute diseases associated with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNA of the invention of the differentially expressed in activated vascular tissue. Note: The sequence data for this patent did not form part of the specification, but was obtained in electronic format directly from uSPTO at Sequence 2384 BP; 797 A; 508 C; 533 G; 546 T; 0 U; 0 Other; http.seqdata.uspto.gov/sequence.html?DocID=20020137081 %X37777777

ઠે 셤 ò 8 g ð

634 GCAGAATGCAGTACAGAACCAGACGGCTGTGATGATAGAAATAGGGACAAACCTGTTGAA 754 274 248 TTTCAGACGGCAGCAGCTCTGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTG 334 308 394 514 ATATCAGGTCCAGGATGGGTCCTGCAGCTACACTTTCCTCCTGCCAGAGATGGACAACTG 488 574 ccecrcrrccrccaccccraccrerccaraccrercacadededecccccccccaara 548 ceargacrecaeaeaecrecaagrecrecaeaeaeaeareareareaaaaacaeaeaeaeae 154 214 188 TGTCTTGGCCGCAGCCTATAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGCA 454 rerciregecescaeceraraacaacirreggaagacaregacaecaraegaaagaagea 428 94 68 TTTCAGACGGCAGCAGCTCGGGACTCTGGACTTTGCTTTGCTCAAGTTTGCTAAGCTG TTGATTCGGATACTGACACTGTAGGATCTGGGGAGAGAGGACAAAGGACCGTGAAAGCT TCCCACTGCAATC GCTCTGTAAAAGCTGACACAGCCCTCCCAAGTGAGCAGGACTGTTCTTCCCACTGCAATC TGACAGTTTACTGCATGCCTGGAGAAGACAGCAGTAAAAACCAGGTTTGCTACTGGAA AAAGAGGAAAGAGAATTTCATTGACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCG CTGGTTTATTACTGAAGAAAGAATGTGGCAGATTGTTTTCTTTACTCTGAGCTGTGATCT CCGCTCTTCCTCCAGCCCCTACGTGTCCAATGCTGTGCAGAGGACGCGCCGCTCGAATA TTGAGGGAACAACACTGTAGGATCTGGGGGAGGAACAAAGGACCGTGAAAGCT Gaps Length 2384; ö 9; Indels Score 2233.6; DB 8; Pred. No. 0; 0; Mismatches 9; I 97.9%; Best Local Similarity 99.6 Matches 2239; Conservative Query Match Best Local Similarity 215 249 395 σ 69 129 429 515 489 549 635 609 695 35 95 155 189 275 335 309 369 455 575 g g δ 요 g ઠે 셤 g g g 요 ò ò ઠ

ò

ą	699	GCAGAATGCAGTACAGAACCAGACGGCTGTGATGATAGAAATAGGGACAAACCTGTTGAA 728
à	755	CCAAACAGCTGAGCAAACGCGGAAGTTAACTGATGTGGAAGCCCAAGTATTAAATCAGAC 814
ą.	729	ccaaacagctgagcaaacgcggaagttaactgatgtggaagcccaagtattaaatcagac 788
ጵ	815	CACGAGACTIGAACTICAGCTCTIGGAACACICCCTCICGACAAATIGGAAAAACA 874
ą	789	CACGAGACTTGAACTTCAGCTCTTGGAACACTCCCTCTCGACAAACAA
à	875	GATTTTGGACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAAAA 934
q	849	GATTTTGGACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAAAA 908
, Ya	935	GAAGGTGCTAGCTATGGAAGACAAGCACATCATCCAACTACAGTCAATAAAAGAAGAAGAA 994
qo	606	GAAGGTGCTAGCTATGGAAGACAAGCACATCATCCAACTACAGTCAATAAAAGAAGAAA 968
à i	995	AGATCAGCTACAGGTGTTAGTATCCAAGCAAAATTCCATCATTGAAGAACTAGAAAAAA 1054
g ;	969	AGATCAGCIACAGGIGTIAGIAICCAAGCAAAAIICCAICAIIGAAGAACIAGAACAAAAAAAA
÷ 8	1029	ANTAGTGACTGCCACGGTGAATAATTCAGTTCTTCAAAAGCAGCAACATGATCTCATGGA 1088
ķ	1115	GACAGTTAATAACTTACTGACTATGATGTCCACATCAAACTCAGGTAAGGACCCCACTGT 1174
q	1089	GACAGITAATAACTTACTGACTATGATGTCCACATCAAACTCAGCTAAGGACCCCACTGT 1148
à	1175	175 TGCTAAAGAAGAACAAATCAGCTTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACAC 1234
g (	1149	TGCT THANGANGANACARANTCHGCTTCHGGANGACTGTGANGTNATCHGANGTNATCHGANGANGANGANGANGANGANGANGANGANGANGANGANG
8 8	1235	CACAAATGGCATCTACACGTTAACATTCCCTAATTCTACAGAAGAAGACCTAAGGCCTACTG 1209
3 &	1295	TGACATGGAAGCTGGAGGGGGGGGGGGGAATTATTCAGCGACGTGAGGATGGCAGCGT 1354
: 음	1269	
à	1355	TGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGGATTTGGTAACCCTTCAGGAGAATA 1414
q	1329	TGATTITCAGAGGACTIGGAAAGAATATAAAGTGGGATTIGGTAACCCTTCAGGAGATA 1388
λ̈́O	1415	TTGGCTGGGAAATGACTTTGCTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAAT
<b>Q</b>	1389	TIGGCIGGGAAAIGAGITIGITITCGCAACTGACIAAICAGCAACGCIAIGIGCITAAAAI 1448
č	1475	
q	1449	ACACCTTAAAGACTGGGAAAGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTCTC 1508
ઠે	1535	AAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAAT 1594
qq	1509	AAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAAT 1568
ò	1595	
D <b>p</b>	1569	AAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATG 1628
È	1655	TATTIGGAAATGITCACAAATGCIAACAGGAGGCIGGTGGTTTGATGCAIGIGGTCCIIC 1714
QQ	1629	TATTTIGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCTTC 1688
Š	1715	CAACTIGAACGGAAIGIACTAICCACAGAGGCAGAACACAAAIAAGIICAACGGCAITAA 1774
qq	1689	cttgaacggaatgtactatcacagaggcagaacacaaataagttcaacggcattaa 174
à		ä .
d d	1749	GGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCATGATCCGACC 180

```
2015 AAACTTGCATCACTTAACGGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGAC 2074
1989 AAACTTGCATCACTTAACGGACCAAAGCAAGACCCTAAACATAATTGTGATTAGAC 2048
                                    2075 AGAACACCTATGCAAAGATGAACCGGAGGCTGAGAATCAGACTGACAGTTTACAGAGGCT 2134
2049 AGAACACCTATGCAAAGATGAACCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCT 2108
                                                                                                                                                                                      1955 TGTGCTCGGTGCTGACGGGACCCACATGCTCCACATTAGAGCCTGTAAACTTTATCACTT 2014
1929 TGTGCTCGGTGCTGACGGGACCCACATGCTCCCAGATTAGAGCCTGTAAACTTTATCACTT 1988
                                                                                                                                                                                                                            CTTATGTTATACAATACAGATCATCTTGGAACTGCATTCTTCTGACCACTGTTTATACAC 2254
TGTGTAAATACCCATATGTCCTGAATTC 2282
                                                                                                                                                                                        2135
                                                                                                                                                                                                          2109
                                                                                                                                                                                                                             2195
                                                                                                                                                                                                                                               2169
                                                                                                                                                                                                                                                                 2255
 δ
              a
                               $ B $ B $ B $ B $
                                                                                                                                                                                                    8 8 8 8
```

Search completed: July 29, 2005, 03:19:05 Job time : 1311.44 secs

ie59h06.y CM3-ST019 ie60e09.y RST34234

Mus muscu 7h66g04.x

UI-1-BCO-NISC\_gf08 SllE04c10

AGENCOURT 602900654 DKFZp459 af94e08.8 PM4-CT064 BP320006

DKFZp686M

Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Searched:

Database

```
Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage: BP 191 91006 EVRY cedex - FRANCE (E-mail: segrefégenoscope.cns.fr - Web: www.genoscope.cns.fr) ist strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized, Library was constructed by Life Technologies, a division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CR62U685 2134 bp mRNA linear HTC 21-JUL-200 full-length cDNA clone CS0D1037YG20 of Placenta Cot 25-normalized of Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact : Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 2114.6; DB 3; Length 2134; Pred. No. 0; 0; Mismatches 4; Indels 3;
                                                                                            BQ004033
CB047127
CB2035207
CO739225
CO739225
CD557075
CO739081
BX504641
BX504641
BX504641
BX504641
BX504641
                                 AW813491
BI962932
BG214591
AK088439
BF062790
                                                                                                                                                                                                                                            BP320006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa; Chordata; Craniata; Verte
Mammalia; Eutheria; Primates; Catarrhini; Hon
1 (bases 1 to 2134)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .2134
/organism="Homo sapiens"
                                                         BG214591
AK088439
BF062790
BQ004033
CB047127
CO735207
                                                                                                                                                                                                                                  BF760470
BP320006
                                                                                                                                                                      CR557075
CO739081
                                                                                                                                                                                                          BX478886
                                                                                                                                                                                                                       AA626077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                  CR620685
CR620685.1 GI:50501492
HTC; CNSLT_CDNA.
HOMO sapiens (human)
HOMO sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 2134)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Faraday Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 2130;
                                                                                                                                   489
                                                                                                                                                            478
475.4
                                                                                                                                                                                    475
470.4
463.4
456.8
449.4
573.4
5562.6
556.2
556.2
546.2
538.4
533.6
533.6
533.4
533.4
533.4
533.4
533.4
533.4
533.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                       RESULT 1
CR620685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UI-1-BC1p
BP321307
DKFZp686H
BP320364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               td16b10.x
602669930
Mus muscu
wf59g08.x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus muscu
Mus muscu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapi
AL548548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pan trogl
UI-H-FT2-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ie60e09.y
BP234525
                                                                                    July 29, 2005, 02:36:24; Search time 8059.43 Seconds (without alignments) 10777.765 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CR620685 full-leng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BX348832
BX391728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ното варі
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                            1 gaatteetggggttggtgtt...........tacccatatgteetgaatte 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AY407059
CB528341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3P234525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP320364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AI809922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BX348832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CF529257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX471613
                                                                                                                                                                                                                                                68479088
               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                         34239544 segs, 19032134700 residues
                                                                                                                                                                                                                                                  Potal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                              nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG212051
CK903582
BP234525
BP347750
CF529257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP321307
BX471613
BP320364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AL548548
                                                                                                                                                                                     IDENTITY_NUC . Gapon 1.0
                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                     US-10-603-293-5
2282
                                                                                                                                                                                                                                                                                                                                                                          990-est1:

990-est2:

900-est43:

900-est43:

900-est6:

900-9861:

900-9881:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  735
696
1218
647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2134
2083
2443
2443
1215
1063
1028
960
932
1213
                                                                                                                                                                                                                                                                                                                                                              EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  229.00
29.00
29.00
29.00
29.00
29.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    578
576
575.4
575.4
574.8
```

933.4 921.6 918.8 840.6 834

Result Š. 798.8 675.8 663.4 652.8

626 611.8 608.8 595.4 592.2

υ

o

9

3; Gaps

Qy         1205 CTGTGCTGAAGTATTCAAATCAGGACACACACAAAATGGCATCTACACGTTAACATTCCC 1264           Db	Oy 1265 TAAITCTACAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGGGTGGAC 1324	Qy         1325 AATTATTCAGCGACGTGAGGATGCCCACGTTGATTTTCAGAGGACTTGGAAAGAATATAA         1384           Db         1258 AATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTCAGAGGACTTGGAAAGAATAA         1317	Oy 1385 AGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT	OY 1445 GACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGC 1504	Oy 1505 TIACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCT 1564	OY 1565 TAAAGGACTTACAGGGACAGCCGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTT 1624	QY 1625 TAGCACAAAGGATGGACAACAACAACAATGTATTTGCAAATGTTCACAAATGCTAACAGG 1684 Db 1558 TAGCACAAAGGATGGAGACAACAACAACAATGTATTTGCAAATGTTCACAAATGCTAACAGG 1617	OY 1685 AGGCTGGTGGTTGATGCATGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAG 1744	Qy 1745 GCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTC 1804	Oy 1805 GCTCAAGGCCACAACGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTG 1864	Oy 1865 AGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGC 1924	Qy         1925 GCACTGTGTCCTCTTCCACCACAGAGGGCGTGTGCTCGGTGCTCACGGGACCCACATGCT 1984           Db         1858 GCACTGTGTCCTCTTCCACCACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACATGCT 1917	Oy 1985 CCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAA 2044	Qy 2045 GACCCTAAACATCCATAATTGTGATTAGACACCTATGCAAAGATGAACCCGAGGC 2104	Oy 2105 TGAGAATCAGACTGACAGTTTACAGACGCTGCTGCACAACCAAGAATGTTATGTGCAAG 2164	Qy         2165 TTTATCAGTAAATAACTGGAAAACAGAACACTTATGT 2201           Db         2098 TTTATCAGTAAATAACTGGAAAACAGAACACTTATGT 2134	RESULT 2 BC022490 LOCUS BC022490 2083 bp mRNA linear HTC 12-OCT-2004 DEFINITION Homo sapiens cDNA clone IMAGE:4792831, containing frame-shift
125 GTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAAACA 184	CAGCAGTAAAAACCAGGTTTGCCAAAAAAAAAAAAAAAA		CGTGTGTTTTGCCCTCAAGTTTGCTAAGCTGCTGTTATTACTGAAGAAGAATGTGGCA  [	GATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCG	GAAGAGCATGGACAGCATAGGAAAGAAGAAGATATCAGGTCCAGCATGGGTCCTGCAGCTA	CACTITICATION CONTROLL AND THE CONTROLL AND THE CONTROLL OF TH	TGCTGTGCAGAGGACGCCCCTCGAATACGATGACTCCCCCCCC	CAGGA	CAACATGAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	GATGATAGAAATAGGGACAAACCTGTTGAACCAAACGGGGGGGG	TGATGGAAGCCCAAGTATTAAATCAACCAGAACTTGAACTTGAGCTCTTGAACA	CTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCGAGACGAGTGAAATAAACAA CTCCCTCTCGACAAAAAAAAAA	ATTGCAAGATAAGAACATTTCCTAGAAAAGAAGGTGCTAGCTA	CATCCAACTACAGTCAATAAAAGAAGAAAGATCAGCTACAGGTTAGTATCCAAGGA	AAATTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGT	TCTTCAAAAGCAACAACATGATCTCATGAGAGACAGTTAATAACTTACTGACTATGATGTT 114	1145 CACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGA 1204 

281 122

62

242 461 302 521

401

```
GAAGAACAAATCAGCTTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAAT 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                             grecascarsesrecriseascraeacrirecrecrisecasasarssaearseceserer 362
                                                                                                                                                                                                                                                                                                           243 GCCGCAGCCTATAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGAAGCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGGT6CAGAGGCTGCAAGTGCTGGAGAACATCGTGGAAAACAACACTCAGTGGCTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGAACTTCAGCTCTTGGAACACTCCCTCTCGACAACAATTGGAAAAACAGATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITGAACITCAGCICITIGAAACACICCCCCTCTCGACAAACAAATTGGAAAAAACAGAITITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAAAAAAGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAAGAACAGTTTCCTAGAAAAGAAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAACTTACTGACTATGATGTCCACATCAAACTCAGGTAAGGACCCCACTGTTGCTAAA
GCAGTACAGGACCAGACGGCTGTGATGATAGAAAATAGGGACAAACCTGTTGAACCAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGAGCAAACGCGGAAGTTAACTGATGTGGAAGCCCCAAGTATTAAATCAGACCACGAGA
                                                                                                                                                                                                                                     GCCGCAGCCTATAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGCAACAATATCAG
                                                                                                                                                                                                                                                                                                                                                        GTCCAGCATGGGTCCTGCAGCTACACTTTCCTGCCAGAGATGGACAACTGCCGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGTACAGAACCAGACGGCTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACA
                                                                     222 AAAGAGAAGACTTTCATTGACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGA
                                                                                        CGGCAGCAGCTCGGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTGCTTGGTTT
                                                                                                                                                                 CGGCAGCAGCAGCACTCTGGACGTGTTTGCCCCTCAAGTTTGCTAAGCTGCTGTTTT
                                                                                                                                                                                                               342 ATTACTGAAGAAAGAATGTGGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTCCAGCCCCTACGTGTCCAATGCTGCAGAGGGACGCGCCGCTCGAATACGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1122
                                                                                                          63
                                                                                                                                             282
                                                                                                                                                                                123
                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                      402
                                                                                                                                                                                                                                                                                                                                                          462
                                                                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                                522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1182
     162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                             a
                                                                       ò
                                                                                                   셤
                                                                                                                                             8,8
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                    L. (Jabers 1 to 2002)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Stapleton, M., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Morlan, K.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Morley, K. C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.M.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Young, A.C., Shevchenko, Y.,
Butfard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Butterfield, Y. S., Krzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Mannya, A., Mannya, S., Morlaysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: MGC help desk
Email: Gapbs-remail.nih.gov
Tissue Procurement Miklos Palkovits, M.D., Ph.D.
Tobhi Library Preparation: Michael J. Brownstein (MHGRI) & Shiraki
Toshiyuki and Piero Carninci (RIKEN)
EDNA Sequencing Py: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 94305
Web site:
http://www-shgc.stanford.edu
Dickson, M.S. mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 2083)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (01-FBB-2002) National Institutes of Health, Mammalian Submitted (10-FBB-2002) National Cancer Gene Collection (MGC), Cancer Genemics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 2083;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="kMAGB:4792831"
/clone ltype="Brain, hypothalamus"
/clone ltb="NHH MGC_96"
/lab_hogt="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 2029.2;
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note="Vector: pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           irector MGC Project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 2083)
                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 88.9
Best Local Similarity 99.4
Matches 2058; Conservative
       BC022490
BC022490.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC
     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                              REFERENCE
                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

542

761 602 821 662 881

701

641

581

1001

1121

962

1181

1001

842

782

AK048622 2443 bp mRNA linear HTC 03-APR-2004 Mus musculus 16 days embryo head cDNA, RIKEN full-length enriched

Group Phase I & II Team.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Lot 60,770 full-length cDNAs

Lot 60,563-573 (2002)

Adachi, 1, Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Katoh, H., Kawai, J., Kodima, Y., Kodo, S., Konno, H., Kowai, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kowai, T., Matsuyama, T., Miyazaki, A., Murata, M., Nishi, K., Momura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Salto, R., Saltoh, H., Sakai, C., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Shinata, T., Sakai, K., Shinata, T., Takaku, T., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Tageda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muramatsu, M., and Hayashizaki, Y. Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system--384-format Genome, Res. 10 (11), 1757-1771 (2000) Submitted (16-UUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-resegsc.riken:jp, cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi; Mammalia, Eutheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus. the The FANTOM Consortium and the RIKEN Genome Exploration Research The RIKEN Genome Exploration Research Group Phase II Team and FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216) High-efficiency full-length cDNA cloning Meth. Enzymol. 303, 19-44 (1999) 99279253 10349636 Carninci, P. and Hayashizaki, Y. Mus musculus (house mouse) Nature 409, 685-690 (2001) AK048622.1 GI:26339449 prepare mouse tissues. HTC; CAP trapper. insert sequence. Mus musculus 11042159 20499374 11076861

```
1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGCTAACAGGAGGCTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTA 1732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACAC 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       952
                                                                                                                                                                  597
                                                                                                                                                                                                                     772
                                                                                                                                                                                                                                                                        657
                                                                                                                                                                                                                                                                                                                               832
                                                                                                                                                                                                                                                                                                                                                                                  717
                                                                                                                                                                                                                                                                                                                                                                                                                                           892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rgaaaraaacaagcracaaaaraagaacagcrrccragaacagaaagrrcrggacargaga 837
                                                      537
                                                                                                         712
  652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOTCTCCCAGCTGACCGGTCACCGCTACGTGCTTAAGATCCAGCTGAAGGACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1438 caggaricaccitacagaacicacgggaccgcgggaaaraagragcarcagccaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTATGATGTCCACATCAAACTCAGGTAAGGACCCCACTGTTGCTAAAGAAGAACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGAGGGTGGACACTCATCCAACACCGAGAAGATGGCAGTGTGGACTTCCAGAGGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1253 GTTAACATTCCCTAATTCTACAGAAGAGTCAAGGCCTACTGTGACATGGAAGCTGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAAGAATATAAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1553 TAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACA
                                                                                                                                           GCTTCTCCCAACATTCTATTTCTACCAACAAATTGGAAAAGCAGATTTTTGGATCAGACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATAATTCAGTTCTTCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACT
                                                                                                               TTATATCCAGGACAACATGAAGAAAGGAAATGGTAGAGATACAGCAGAATGCAGTACAGAA
                                                                                                                                                                                                                        CCAGACGGCTGTGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAAC
                                                                                                                                                                                                                                                       773 GCGGAAGTTAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCTTGGAACACTCCCTCTCGACAAACAAATTGGAAAAAACAGATTTTGGACCAGACCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   898 gererccaagcagagcrerercarreaccagcregagaagaagaagcregreacagere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1493
                                                                                                                                                                                                                                                                                 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1673
                                                                                                                    653
                                                                                                                                                                                                                              713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ` 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
                                                                                                                                                         셤
                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                    ठ
           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / LTAIN STATE OF THE TOTAL THE TOTAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10;
                                                                                                                                                                                                                                                                                                                                          enriched mouse cDNA library'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAATGTGGCAGATTGTTTTTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTA 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAATGTGGCAGATCATTTCCTAACTTTTGGCTGGGATCTTGTCTTGGCCTCAGCCTA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCCCTCCCAAGTGAGCAGGACTGTTCCCCACTGCAATCTGACAGTTTACTGCATGC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGAGAGAACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAAGAGGAAAGAGAAGAC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITCATIGACGGACCCAGCCAIGGGAGCGIAGCAGCCCTGCGITTCAGACGGCAGCAGCT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGGACTCTGGACGTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGA 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Acceracided Acceracide de Accesa de Accesa de Contro de Accesa de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="unnamed protein product; ANGIOPOIETIN-2 PRECURSOR (SWISSPROT|035608, evidence: FASTY, 99.6%ID, 100%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAAGAGAGAGAGAGACAGGCACTGGGAAAGAGCCTG---CTGCGGGACGGAGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCTGCAGCTACACTTTCCTCCTGCCAGATGGACAACTGCCGCTCTTCCTCCAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rcrcacrcarcarcarca---caccacacaccicrcrcraca---caccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGCTCAGGACGCAAGTTTGC----TGAACTCACAGTTTAGAACCCCAAAAAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1068.2; DB 3; Length
Pred. No. 2.4e-283;
0; Mismatches 548; Indels
        Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
Location/Qualifiers
                                                                                                                                                                        /mol_type="mRNA"
/strain="C57BL/6J"
/db_xref="FANTOM_DB:C130089A05"
/db_xref="taxon:10090"
/clone="C130089A05"
                                                                                                                                                                                                                                                                                                           /tissue type="head"
/clone lib="RIKEN full-length
/dev_stage="16 days embryo"
242. 1732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
/proteIn_id="BAC33396.1"
/db_xref="G1:26339450"
                                                                                                                                                 organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46.8%;
ilarity 71.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                match=1488)
putative"
                                                                                                                             . 2443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2427.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1557; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

a

QQ

ò

음 장

g ઠે 8 ર્જ දි දි ठ g ò

ò 유 ð 원 à ద ò g à g à 셤 ò 셤 ð 셤 ò 셤 ò g

```
The FANTW CORDITION and the KIAEN Genome Exploration Rebearch
droup phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length CDNAs

Location 10, Alzawa, K., Akahira, S., Akimura, T., Arai, A., Aono, H.,
Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y.,
Furuno, M., Hanagaki, T., Hara, A., Hayatsu, N., Hiramoco, K.,
Hiraoka, T., Hori, F., Imotani, K., Ishii, Y., Itch, M., Izawa, M.,
Kasukawa, T., Kato, H., Kawai, J., Kojima, Y., Konno, H., Kouda, M.,
Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Nishi, K.,
Numazaki, R., Ohno, M., Okazaki, Y., Okido, T., Owa, C.,
Saito, H., Saito, R., Sakai, C., Sakai, K., Sano, H., Saaski, D.,
Shibata, K., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y.,
Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Tanaka, T.,
Yoshino, M., Muramatsu, M. and Hayashizaki, Y., Yoshida, K.,
Submitted (18-AUG-2000) Yoshinide Hayashizaki, The Institute of
Physical and Chemical Research (RIKEN), Laboratory for Genome
Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
RIKEN Yokohama Institute; 1-7-22 Suchiro-cho, Tsurumi-ku, Yokohama,
Kanagawa 230-0045, Japan (8-mail Jenome-resegge: riken.jp,
URL: http://genome.gsc.riken.jp/, Tel:81-45-503-9222,
PARSEN FARSEN FA
Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Please visit our web site (http://genome.gsc.riken.jp/) for further
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mouse cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                            The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue type="ovary and uterus"
/clone_lib="RIKEN full-length enriched |
/dev_stage="11 days pregnant adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="FANTOM_DB:5031400E18"
/db_xref="taxon:10090"
/clone="5031400E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      end: BamHI. Host: DH10B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FANTOM Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . . 2475
                                                                                                                                                                                                                                                                                                                                           11076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                         JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                           PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAICCACAGAGGCAGAACACAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGG 1792
                                                                                                                                                       CTACCCACAAAAACAGAATACAAATAAGTTTAACGGTATCAAGTGGTACTACTGGAAGGG 1677
                                                                                                                                                                                                                                       1793 CTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGTTTCTAAACATC 1852
                                                                                                                                                                                                                                                                                1678 GTCCGGCTACTCGCTCAAGGCCACAACCATGATGATCCGGCCACAGATTTCTAAATGCC 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTCACGGCTGCGCACTGTGTCCTCTTCCACCACAGAGGCCGTGTGCTCGGTGCTGACGG 1972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1943 ----GTTGTGGCTGAGGATCAGAAGACAGCGTGCAGAC---TCTGTCACACAGGAAGAAT 1995
                                                                                                                                                                                                                                                                                                                                                                      1853 CCAGTCCACCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAA 1912
                                                                                                                                                                                                                                                                                                                                                                                                                                        1738 TGCCTACACTACCAGAAGAACTTGCTGC----ATCCAAAGATTAACTCCAAGGCACTGAG 1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1794 AGACAC--CAATGCATAGCAGCCCCTTTCCACATCAGGAAGTGCTCCTGGGGGTGGGGAG 1851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1852 GGTCTGTGTGTACCAGACTGAAGC-----GCATCACTTAAGCCTGCACCGCTAACC 1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2213 GATCATCTTGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATG 2272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HTC 03-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      new genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AK019860 arkn linear HTC 03-APR-20 has musual linear HTC 03-APR-20 has musculus 11 days pregnant adult female ovary and uterus cDNA, RIKEN full-length enriched library, clone:5031400918 product:ANGIOPOIETIN-2 PRECURSOR, full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2153 GTTATGTGCAAGTTTATCAGTAAATAACTGGAAAACAGAACCTTATGTTATACAATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2056 ----ATCTTGGGACCACATTCCTCTAAGCACGGTTTCTAGAGTGAATACATTCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1973 GACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2033 GGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1903 AACCAAAGGCACTGCAGTCTGGAGAACACTTCTGGGAAG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2093 TGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carninci, P. and Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AK019860.1 GI:12860231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2273 TCCTG 2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2112 GGCTG 2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4K019860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .0349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20499374
                                                                                                                                                                         1618
                                         1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
AK019860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
```

```
1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGCAACGAGGCGCATTCGCTGTATCATCACTTCTACCTCGCTGGTGAAGAGTCCAACTA 1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAGTCCACCTGAGGAACTGTCTGGAACTATTTTCAAAGACTTAAGCCCCAGTGCACTGAA 1912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1132
                                                                                                                                                                                                                                       1012
                                                                                                                                                                                                                                                                                                                                   1072
                                                                                                                                                                                                                                                                                   929
                                                                                                                                                                                                                                                                                                                                                                                  989
                                               892
                                                                                         809
                                                                                                                                           952
                                                                                                                                                                                          869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rercreccaecreaccearcaecaccecracerecrisaearceaecreaecreaecreae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caddatricaccrracaddacrcacaddaccccccaaaaraagragcarcaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAIGCTCTCAGGAGGCTGGTGGTTTGACGCATGTGGTCCTTCCAACTTGAATGGACAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGGATTCACCTTAAAGGACTTACAGGGACAGCGGCAAAATAAGCAGCATCAGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACCCACAAAAACAGAATACAAATAAGTTTAACGGTATCAAGTGGTACTACTGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCCGGCTACTCGCTCAAGGCCACAACATGATGATCCGGCCAGCAGATTTCTAAATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTAACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IGTITCGCAACTGACTAATCAGCACGCTATGTGCTTAAAATACACCTTAAAGACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTA
TCGGAAACTGACTGATGTGGAAGCCCAAGTACTAAACCAGACGACAAGACTCGAGCTGCA
                                                                                  810 TGAAATAAACAAGCTACAAAATAAGAACAGCTTCCTAGAACAGAAAGTTCTGGACATGGA
                                                                                                                                                                                                                                       953 AGACAAGCACATCATCCAACTACAGTCAATAAAAGAAGAAAAATCAGCTACAGGTGTT
                                                                                                                                                                                                                                                                                   gegcialecaccaecaecaecraciacicareaaeaaecaeaaaeaaeaaeaaecaecaecraecra
                                                                                                                                                                                                                                                                                                                                   930 gererccaaecagaecrerercarreaceaecrecagaagaagaageregreacaecaeca
                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATAATTCAGTTCTTCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 990 CAACAACTCGCTCCTTCAGAAGCAGCAGCATGACCTAATGGAGACCGTCAACAGCTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTATGATCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAGAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTT
                                               GCTCTTGGAACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAG
                                                                                                                                             TGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAAAAGAAGGTGCTAGCATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1470
                                                                                                                                                                                                                                                                                                                                          1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1710
       9
                                                                                                                                                893
                                                                                                                                                                                                                                                                                           870
                                                                                                                                                                                                                                                                                                                                                                                                                                      1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1133
                                                                                                   750
                                                      833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                    8 8 8
                                                                                                                                                                                     셤
                                                                                                                                                                                                                                            ò
                                                                                                                                                                                            / LTAINED A. THOUGH THITPGWDLVIASAYSNFRKSVDSTGRRQYQVQNGPCSYT TELETDSCRSSSPYWSNAVQRDAPLDYDDSVQRLQVLGVLENILENNYTQWLMKLENYIQ DNMKKEWVEJ QQNVVQNQTAMIE TSELLQYDDSVQRLQVLGVELAVLNYTQWLMKLENYIQ DNWKKEWVEJ TAYBAMIE TSELLQYTSLLQYSTRATWNSLLQYGYLDSTRKKLTYDVBGKHSBQLQSMKEQDDELQY LVSKQSSVIDELEKKLYTATVNNSLLQKQQHDLMSTVNSLLTMMSSPNSKSSVAIRKE BOTTFRDOAE IFKSGLYTSGIYYLTFRYSNBTERTAYCDMDVGGGGMYTQHREGSPNSTRE FORTWKEYKEGFGSPLGSYWLANSFVSQLTGQHRYVLKIQLGXDWGGGGWYTQHREGSYDFSYNLGNSFVSQLTGQHRYVLKIQLGXDWGGNEAHSIYDHFYL AGEBSNRTHILTGTAGKISSISQPGSDFSTKOSDNDKCICKCSQMLSGGWWFDACGFSPNINGFVSQCKSGGGWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFDACGFSFRCSWFTATTFWIRPADF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        214
                             /note="unnamed protein product; ANGIOPOIETIN-2 PRECURSOR (SWISSPROT 035608, evidence: FASTY, 99.6%ID, 100%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGACGGCTGTGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGGAAGTTAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cagaccricregagricalgedrágecrigerrecrereresagades cagareres de caga esta en caga en caga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAATGTGGCAGATCATTTCCTAACTTTTGGCTGGGATCTTGTCTTGGCCTCAGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTIGCAGCTACACGTTCCTGCTGCCGGAGACCGACAGCTGCCGCGATCTTCCTCCAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACGTGTCCAATGCTGTGCAGAGGACGCGCCCTCGAATACGATGACTCGGTGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cracarerccaareccerecaesearecaceccerceacraceaceaceaese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGCAAGTGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAAGAGAGAGAGAGACAGGCACTGGGAAAGAGCCTG--CTGCGGGACGGAGAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCATTGACGGACCCAGGCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcrcacrdarddacrrarrca---cadddadddargccrradd---caddaddr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGGACTCTGGACGTGTTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gagageticaggacgcaagtitige----tgaactcacagittagaacccaaaaagagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGAATGTGGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Greengeracaerricerecracadagargacaaeracegererrecreageee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATATCCAGGACAACATGAAGAAAGGAAATGGTAGAGATACAGCAGAATGCAGTACAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCCTCCCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGAGAGAACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAAGAGAAAAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGAAGCAATATCAGGTCCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1068.2; DB 3;
Pred. No. 2.4e-283;
); Mismatches 548;
                                                                                                                              /codon_start=1
/protein_id="BAB31887.1"
/db_xref="G1:12860232"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .,
                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                       .2464
                                                                               match=1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                             putative
                                                                                                                                                                                                                                                                                                                                                                                                                     2459.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi
Matches 1557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               533
              CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

8 6 8 6

g

ઠ

g

ò

8 6

6 B 6 B 6 B 6

6 6 6 6

a

à g ò g ે 쉽 ò g 8 qq 8 g ò 셤

```
1052
                                                                                                                                                                                                                                1112
                                                                                                                                                                                                                                                                                                1172
                                                                                                                                                                                                                                                                                                                                                                1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1200
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                ACCACAAATGGCATCTACACGTTAACATTCCCTAATTCTACAGAAGAGATCAAGGCCTAC 1292
                               932
                                                              300
                                                                                                992
                                                                                                                               360
                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGATCGGCTACGGGTGTTAGTATCCAAGCAAAATTCCATGAAGAACTAGAAAAA
                                                                                                                                                                                                                                                 GAGACAGTTAATAACTTACTGACTATGATGTCCACATCAAACTCAGCTAAGGACCCCACT
                                                                                                                                                                                                                                                                                                                                                                                   GTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTGTGCTGAAAGTATTCAAATCAGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781 TATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATT
                               CAGATTTTGGACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAA
                                                              241 CAAGTGCTGGAGAACATCATGGAAAACACACTCAGTGGCTAATGAAGAGTTTCCTAGAA
                                                                                                                                                                                               361 AAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAATTCCATCATTGAAGAACTAGAAAAA
                                                                                                                                                                                                                                AAAATAGTGACTGCCACGGTGAATAATTCAGTTCTTCAAAAGCAGCAACATGATCTCATG
                                                                                                                                                                                                                                                                                                GAGACAGTTAATAACTTACTGACTATGATGTCCACATCAAACTCAGCTAAGGACCCCCACT
                                                                                                                                                                                                                                                                                                                                                                GTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTGTGCTGAAGTATTCAAAATCAGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCACGAATGGCATCTACACGTTAACATTCCCTAATTCTACAGAAGAGATCAAGGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGACATGGAGGAGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGGATTTGGTAACCCTTCAGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACACCTTAAAAGACTGGGAAGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATACACCTTAAAGACTGGGAAGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGGCCGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901 TCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAACTIGAACGGAATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCT
 Gaps
 ö
Indels
 56;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAGCAGATTTCTAA 1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGCAGATTTCTAA
 949; Conservative
                               873
                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                1173
                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                993
                                                                                                                                                                                                                                1053
                                                                                                                                                                                                                                                                                                1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1833
 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
AL548548
                               ò
                                                        셤
                                                                                             δ
                                                                                                                       ద
                                                                                                                                                              ઠ
                                                                                                                                                                                          a
                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                2212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1215 bp DNA linear GSS 15-DEC-2003 Homo sapiens ANGPT2 gene, VIRTUAL TRANSCRIPT, partial sequence, 949407050
                                                                                                                                                                                                                                                2027
                                                                                                                                                                                                                                                                                                                                                2272
               AGTCACGGCTGCGCACTGTGTCCTCTTCCACCACAGAGGCGTGTGTGCTCGGTGCTGACGG 1972
                                            2033 GGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGA 2092
                                                                                                                                                                                                                                                                                                                                                                2088 ----ATCTTGGGACCACATTCCTCTAAGCACGGTTTCTAGAGTGAATACATTCACAGGTC 2143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

(Dases 1 to 1215)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Adams, M.D. and Cargill, M. Erriers, Submission Bubmitted (16-N0V-2003) Celera Genomics, 45 West Gude Drive, Submitted (16-N0V-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
                                                                                                       1884 GGTCTGTGTGTACCAGACTGAAGC-----GCATCACTTAAGCCTGCACCGCTAAACC
                                                                                                                                                                                                                                                                                                              2028 GTTCCGTGGGAGTTCAGCAGTAAATAACTGGAAAACAGAACACTTAGATGGTGCAGATAA
                                                                                                                                                                                                                                                                                                                                               2213 GATCATCTTGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATG
                                                                             1973 GACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAAC
                                                                                                                                                                                                             2093 TGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAAT
                                                                                                                                                                                                                                            1975 ----GTTGTGGCTGAGGATCAGAAGGACACCGTGCAGAC---TCTGTCACACGGAAGAAT
                                                                                                                                                                                                                                                                             GTTATGTGCAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACA
                                                                                                                                                                            1935 AACCAAAGGCACTGCAGTCTGGAGAAACACTTCTGGGAAG-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 933.4; DB 9; Length 1215; Pred. No. 3.5e-246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /locus_tag="HCM2764"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AY407058
AY407058.1 GI:39763029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene="ANGPT2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .>1215
                                                                                                                                                                                                                                                                                                                                                                                                                                             2144 GGČTG 2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              2273 TCCTG 2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO
             1913
                                                                                                                                                                                                                                                                             2153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
AY407058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
```

```
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE
Email: sequencope.cns.fr, Web : www.genoscope.cns.fr
1st strand CDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSFORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL573084 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA Clone CSODI037YG20 3-PRIME, mRNA sequence.
AL573084 AL573084 GI:46246304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATCCAACTACAGTCAATAAAAGAGAAAGATCAGCTACAGGTGTTAGTATCCAAGC 1023
                                                                                                                                                                                                                                                                                                                                                            719
                                                                                                                                                                                                                                                                                                                                                                                                                                 780 crecercresadadadadadadadadadadarririgadecagaceagadadadadada 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     479
                                                                                                                                                            664
                                                                                                                                                                                                  599
                                                                                                                                                                                                                                       724
                                                                                                                                                                                                                                                                               629
                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                                      844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                785 TGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 904 AAITGCAAGATAAGAACAGTITCCTAGAAAAGAAGGTGCTAGCTAGGAAGACAAGCACA
                      420 CACTITICCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAA
                                                                             545 TGCTGTGCAGAGGGACGCGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCT
                                                                                                    605 GGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGA
                                                                                                                                                                               540 GGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGA
                                                                                                                                                                                                                                            665 CAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGT
                                                                                                                                                                                                                                                                 725 GATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGAGCCAGTGAAAT-AAACA
CACTITICCTCCTGCCAGAGATGGACACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODIO37BD10NP1&c=4496.r. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 1028)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length CDNA libraries and normalization
Unpublished (2001)
On Feb 16, 2001 this sequence version replaced gi:31294447.
Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1024 AAAATTCCATCATTGAAGAACTAGAAAAAAA 1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         957
      485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
AL573084/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL.
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                     셤
                                                                                                                  요
                                                                                                                                                                ò
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                     ઠે
                                                                                                                                                                                                                                                                                 Contact: Genoscope
Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
          EST 25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGACCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATIGITITICITIACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCG 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTCCCAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGCAGGACTGTTCCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACA 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAAGAGAAGACTTTCATTGACGG 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGCCAGCAGCTCGGGACTCTGGA 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AL548548 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA
CODOR 25-NORMALIZED Homo sapiens CDNA
Clone CSODI037YG20 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODIO37BD10QP1&c=4496.r. Location/Qualifiers
                                                                                                                                                                  Craniata; Vertebrata; Eutel
Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40.4%; Score 921.6; DB 1; Length 1063; 98.1%; Pred. No. 6.2e-243; ive 10; Mismatches 4; Indels 5;
                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Verte Mammalia; Butheria; Primates; Catarrhini; Hon 1 (bases 1 to 1063)
Lii, W.B., Gruber, C., Jessee, J. and Polayes, D. Wull-length cDNA libraries and normalization Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DI037YG20"
                                                                                       AL548548.3 GI:45748972
                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i. .1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                  Homo sapiens
                                                                  AL548548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4496.r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
          LOCUS
DEFINITION
                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRIGIN
```

g

8 셤 ઠે 셤 Ś 셤 જે 8 G ò g ઠ

```
Entaryota; Metazoa; Chordata; Craniata, Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

Entaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

Entaryota; Entaryota; Primates; Catarrhini; Hominidae; Homo.

Entaryota; Carber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)

Contact: Genoscope

Genoscope - Centre National de Sequencage

Z rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE

Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr

1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and cloned into the Not I and cloned into the Not I and cloned division of Invitrogen. This sequence belongs to sequence cluster
                                   AGATGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAG 2149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSOBAG030ZC09_CS02851_1&c=4496.r
                                                                                                                                                                                                                                                BX348832 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CS0DI037YG20 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024 AAAATTCCATCATTGAAGAACTAGAAAAAAAAAATAGTGACTGCCACGGTGAATAATTCAG 1083
174 AACGGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAA 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue type="PLACENTA COT 25-NORMALIZED"
/clone lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR v
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             114 AGATGAACCCGAGGCTGAGAATCAGACTGACAGTTCACAGACGCTGCTGTCACAACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       844 ACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGTTATGTGCAAGTTTATCAGTAAA--TAACTGGAAAACAGAACACTTATGT 2201
                                                                                                                                     AATGTTATGTGCQAGTTTATCNAGTAANNNAACTGGAAAACAGAACACACTTATGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 840.6; DB 5;
Pred. No. 1.5e-220;
0; Mismatches 38;

    .960
    /organism="Homo sapiens"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DI037XG20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                            BX348832.1 GI:30365305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jerry Match
Best Local Similarity 95.2%;
Matches 916; Conservative (
                                                                                                                                                                                                                                                                                                                                                                  sapiens (human)
                                                                                                                                                                                                                                                                                                          BX348832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4496.r
                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                EST
                                     2090
                                                                                                               2150
                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964
                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                            α
                                                                                                                                                                                                                                BX348832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                   ò
                                                               .
Dp
                                                                                                           δ
                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                1309
                                                                                                                                                                                                                                                                                                                                                                                                                                         1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACGGACCAAAGCAAGACCCTAAAAATTGTGATTAGACAGAACACCTATGCAA 2089
                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1610 ACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTC 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAATGCTAACAGGAGGCTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAAT 1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            175
                                                                                                                                                                                                                                                                                                                            953
                                                                                                                                                                                                                                                                                                                                                                                                     894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATCATCCGACCAGCAGATTTCTAAAC 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 235
                                               /tissue type="PIACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="list strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pGWVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                            CACGTTAACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAAC
                                                                                                                                                                                                                                                                                    1190 AATCAGCTTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTA
                                                                                                                                                                                                                                                                                                                                                                                                   952 CACG-TWACATTCCCTAATTCTACAGAGAGATCAAGCCCTACTGTAACATGGAAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             893 AGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAAGGGAATGAGCCTTACTCATTGTATGAACATTTCTATCTCTCCAAGTGAAGAACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        533 ACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTACTATCCACAGAGGCAGAACACACAAATAAGTTCAACGGCATTAAAATGGTACTACTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTACTATCCACAGAGGCAGAACACACAATAAGTTCAACGGCATTAAATGGTACTACTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCAGTCCACCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCAGTCCACCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAGTCACGGCTGCGCACTGTGTCCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATACACTTAAACTTGCATCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGTCACGG-TGCGCACTGTCCTCTTCCACCACAGAGGGCGTGTGCTCGGTGCTGA
                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                          7;
                                                                                                                                                                                                          Score 918.8; DB 1; Length 1028;
Pred. No. 3.6e-242;
9; Mismatches 18; Indels 7;
             /db_xref="taxon:9606"
/clone="CS0DI037YG20"
type="mRNA"
                                                                                                                                                                                                          40.3%;
96.6%;
                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                              980;
                                                                                                                                                                                                                                                                                                                                                                1250
                                                                                                                                                                                                                                                                                                                                                                                                                                         1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 293
                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                Best Local
Matches 98
                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

1023

183

243

123

963

63

5

8; Gaps

g

Š

셤

ઠે

8 8

g

ठ

8 8 ò 셤

```
1. :932
|/organism="Homo sapiens"
|/mol_type="mRNA"
|/mol_type="mRNA"
|/db_xref="taxon:9606"
|/db_cae="CS0D1031YG2O"
|/ciosue_type="PLACENTA COT 25-NORMALIZED"
|/ciosue_type="PLACENTA COT 25-NORMALIZED"
|/ciosue_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
|/ciosue_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
|/cione="lib="Homo sapiens Place"
|/cione="lib="Homo sapiens Place"
|/cione="lib="Homo sapiens Place"
|/cione="lib="Homo lib="homo lib="lib"
|/cione="lib="homo lib="lib"
|/cione="lib="homo lib"
|/cione="lib"|
|/cione="
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMYSORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 4496.r
                                                                                                                                                                 For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSOBAI021ZF06_CS01966_1&c=4496.r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receectroctroncaeccorrattercocarcoretrosaagaceceecer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAAAGAAGGTGCTAGGTATGGAAGACAAGCACTACATCCAACTACAGTAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAATTCCATCATTGAAGAACTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1049 AAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCTTCAAAAGCAGCAACATGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1109 CATGGAGACAGTTAATAACTTACTGACTATGATGTCCACATCAAACTCAGCTAAGGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATATCAGGTCCAGCATGGTTCCTGCAGCCAAACTTTCCTCTTGCCAAAGATGGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G-AATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGAGAACATCATGGAAAACAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GABATACGATGACTCGGTGCAGAGGCTGCAGTGCTGNAGAACATCATGGAAAACAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGATGGATAGAAATAGGGACAAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGATGTGGAAGCCCAAGTATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTCCCTCTCGACAAAAAATTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAATAGTGGCTGCCACGGTGAATAATTCAGTTCTTCAGAAGCAGCAACATGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGCT -- CTTCCTCCAGCCCCTACGTGTCCAATGCTGTGCAGAGGGACG-CGCCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGATGGATAGAAATAGGGACAAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATATCAGGTCCAGCATGGTCCTGCAGCTACACTTTCCTCCTGCCAGAGATGGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 834; DB 5; I
Pred. No. 9.9e-219;
0; Mismatches 23;
                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 36.5%;
Local Similarity 96.7%;
nes 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BX391728 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CSOD1037YG20 3-PRIME, mRNA sequence.

BX391728.1 GI:30619519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1741
                                                                                                                          1203
                                                                                                                                                                                                                   1263
                                                                                                                                                                                                                                                                                                               1323
                                                                                                                                                                                                                                                                                                                                                                                                        1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTA 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        839
                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGGCTGNTGGTNTTGATGCATGTTGGTCTTTCAACTTGAACGGGATGTACTATCCACA 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGCAGACCAC-AATAAGTTCAACGGCATTTAATGGTACTACTTGGAAGTCTACAGCTT 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 932)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTAGCACAAAGGATGGAGACAACAACAAAATGTATTTGCAAATGTTCACAAATGCTAACAG
                                                                                                                                                                                                                                              CAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tragcacaaaaggargacacacaaaargrartracaaargrrcacaaargcraacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGCTGGT--GGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACA
                                                         ccacarcaaacr --- craaggaccccacrgrrgcraaagaagaacaaarcagcrrcagag
                                                                                                                                                                                                                                                                                                            CTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATT
                                                                                                                          CCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAG
                                                                                                                                                                                                                   ACTGTGCTGAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAACATTCC
                                 TTCTTCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (Dases 1 to 932)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TT 1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ė
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1802
                                                                                                                               1144
                                                                                                                                                                                                                        1204
                                                                                                                                                                                                                                                                                                                 1264
                                                                                                                                                                                                                                                                                                                                                                                                             1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               959
                                    1084
                                                                                 244
                                                                                                                                                                        304
                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX391728/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
```

Q

ò g 8

중 음 ઠે g

셤

8

ద

8 용

\$

628

752 688 692 748

512 872 269 812 632

808 572 868 512 928 452 988 1048

332

392

1108

272

422

2023

2083

242

302

2143

62

```
M.D., Ph.D.
CDNA Library Preparation: M. Bento Soares, Ph.D.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
CDNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.B. Consortium/LLNL at:
www-bio.llnl.gov/bbpp/image/image.html
Seq primer: -400P from Gibco
High quality sequence stop: 475.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AI862415
td16b10.x1 NCI CGAP CO16 Homo sapiens CDNA clone IMAGE:2075803 3'
similar to TR:015123 O15123 ANGIOPOIETIN-2.;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2144 ACCAAGAATGTTATGTGCAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTA 2203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2204 TACAATACAGATCATCTTGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGAAAT 2263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 ATGCAAAGATGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACA 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (Sases 1 to 735)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 TGCTGACGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                              2084 ATGCAAAGATGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACA
             CTAAACATCCCAGTCCACCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAG
                                        1904 TGCACTGAAAGTCACGGCTGCGCACTGTGTCTTCCACCACCACAGAGGGCGTGTGCTCGG
                                                                                                                                                     2024 TCACTTAACGGACCAAAGCCATAACATCCATAATTGTGATTAGACACACT
                                                                                                                                                                                                                                                                                                                                                                             301 reactraacegaccaaaecaaaeccraaacarccaraarrerearrasacaecacr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Ilan Kirsch, M.D., Michael R. Emmert-Buck,
                                                                                                                                                                                                                        1964 TGCTGACGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ACCCATATGTCCTGAATTC 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AI862415
AI862415.1 GI:5526522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2264
                     1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
AI862415/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                     g
                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Mo. Type="Markana" / Mo. Type="Markana" / Mo. Type="Markana" / Mo. Type="Markana" / Libb xref="Laxon:9606" / Clone="UI-H-FT2-bjg-j-05-0-UI" / Libb most="Markana" / Libb most="Markana" / Libb most="Markana" / Libb most="Markana" / Libb most="Did ilb="Markana" / Libb most="Did ilba" / Libb most markana / Libb modified polylinker; Site 1: EcoR I; Site 2: Not I; Mol CGAP FT2 is a subtracted cDNA library constructed from a pool of 81 RNA samples from Alveolar Macrophages challenged with different treatments. The mRNA samples were a mixture of these conditions (times refer to incubations following isolation by bronchoalveolar lavage) (some normal donor macrophages were cultured in some of the conditions, other donor macrophages in different conditions, other donor samples were pooled for library construction. Control 0. hours; control 3 hours; Riebsiella moi 10, 3 hours; Adenoviral vector (AdS CMV eGFP), moi 500, 24 hours; Adenoviral vector (AdS CMV eGFP), moi 500, 24 hours; Adenoviral was subtracted according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. The tissue was subtracted according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. The tissue was provided by Dr. Gary W. Hunninghake of the University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAAACGACAAATGTATTTGCAA 1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1664 ATGTTCACAAATGCTAACAGGAGGCTGGTTTGATGCATGTGTGCTTCCAACTTGAA 1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGAATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTA 1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTT 1843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                      Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Gary W. Hunninghake, U of I
CONA Library preparation: Dr. M. Bento Soares, University of Iowa
CNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found at
http://genome.uiowa.edu/distribution/cgap.html
Seg primer: Ml3 FORWARD
POUXA=Yes.
1 (bases 1 to 721)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29.6%; Score 675.8; DB 6; Length 721; 99.7%; Pred. No. 5e-175; ive 0; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAG_TISSUE=Human Lung Alveolar Macrophage
TAG_LIB=UI-H-FT2
TAG_SEQ=GGCCATGCCG"
                                                                                                                                                                                                                                                                                                                                                                                                                         1. .721
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 29.6
Best Local Similarity 99.7
Matches 677; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                              source
     REFERENCE
                                AUTHORS
                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                      TITLE
```

8 ò 요 ò 셤 ò Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (Dases 1 to 656)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.

Enail: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
CDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiral
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMIOG71 row: k column: 08
High quality sequence stop: 677.

/organism="Homo sapiens"
|mol\_type="mkNA"
|db\_xref="taxon:9606"
|clone="IMAGE:4792831"
|tissue\_type="hypothalamus"

1. .696

source

FEATURES

/lab host="DH10B

þ

```
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
modified polylinker, Site_1: Not I, Site_2: Eco RI; Plasmid DNA from the normalized library NCI CGAP CO10 was prepared, and se circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (cloneIDs 105746-106125, and 1144584-1145351).
Subtraction by Bento Soares and M. Patima Bonaldo. "
                                                                                                                                                                                                                                                       1640
                                                                                                                                                                                                                                                                                                                           GACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGAT 1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TICAACGCCATTAAATGGTACTACTGCAAAGGCTCAGGCTATTCGCTCAAGGCCACAACC 1820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2240
                                                                                                                                                                                                                                                                                                                                                                                                 GCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACAAATAAG 1760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGATGATGCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGGAACTGTCTCGAAC 1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001 AAACTITATCACTIAAACTIGCATCACTIAACGGACCAAAGCAAGACCTAAACATCCAT 2060
                                                                                                                                                                                                                                                                                           9/9
                                                                                                                                                                                                                                                                                                                                                                919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        497
                                                                                                                                                                                                                                                                                                                                                                                                                                    557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436 TATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCACTGTGTCCTCTTC 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                             GACAACGCAAATAGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCAGATTAGAGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTITACAGACGCTGCTGTCACAAGAATGTTATGTGCAAGTTTATCAGTAAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196 AGTTTACAGACGCTGCTGTCACAAGAATGTTATGTGCAAGTTTATCAGTAAATAAC
                                                                                                                                                                                                                                                       1581 ACAGCCGCCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                  615 GCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACAC-AATAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGGCTATTCGCTCAAGGCCACAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496 ATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGGAACTGTCTCGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCACTGTGTCTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACCACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCAGATTAGAGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGAGAATCAGACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGAGAATCAGACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACTGCATTCTTCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136 TGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACTGCATTCTTTGAG
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                     1;
                                                                                                                                                                                Length 735;
                                                                                                                                                                                                                     17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTGTTTATACACTGTGTAAATACCCATATGTCCTGAATTC 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTGTTTATATACACTGTGTAAATACCCATATGTCCTGAATTC 35
                                                                                                                                                                                Score 663.4; DB 1;
Pred. No. 1.3e-171;
0; Mismatches 17;
                                                                                                                                                                                29.1%;
                                                                                                                                                                                                                   Matches 684; Conservative
                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                           1641
                                                                                                                                                                                                                                                                                                                                                                                               1701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2241
                                                                                                                                                                                                                                                                                                                                                              675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        929
                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76
                                                                                                                                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
BG714406
LOCUS
                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

```
/.clone_lib="NIH MGC 96"
//olone_lib="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site: lamMH; Site 2: Sall-XhoI gluegas); Oligo-dT primed using primer for average insert size 2:3 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMM/NHGRI, National Institutes of Health). Note: this is
                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                                         127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368 recreasecectraegrerecaarsergrecassesacececececeaaraasarsac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGGTGCAGAGGCTGCAAGTGCTGGAGAACATCATGGAAAACAACACTCTGGTGGCTAATG
                                                                                                                                                                                                                                                                                                                             TTACTGCATGCCTGGAGAGAACACAGCAGTAAAAACCCAGGTTTGCTACTGGAAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                              8 TTACTGCATGCCTGGAGAGAGACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                      222 AAAGAGAAGACTTTCATTGACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                         68 AAAGAGAACTTTCATTGACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128 CGGCAGCAGCTCGGGACTCTGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTGCTGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTACTGAAGAAAGAATGTGGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCGCAGCCTATAACAACTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCCAGCATGGGTCCTGCAGCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCCAGCATGGGTCCTGCAGCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTCCAGCCCCTACGTGTCCAATGCTGTGCAGAGGGACGCCCCCCTCGAATACGATGAC
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                        2;
                                                                                                                                                                                                                                                   DB 4; Length 696;
                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                 tch 28.6%; Score 652.8; DB 4; al Similarity 98.7%; Pred. No. 1.1e-168; 679; Conservative 0; Mismatches 7;
                                                                                                                                                                                            a NIH MGC Library."
                                                                                                                                                                                                                                                   Query Match
Best Local Si
Matches 679;
                                                                                                                                                                                                                                                                                                                             162'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

EST 08-MAY-2001

BG714406 696 bp mRNA linear EST 08-MAY-2: 602669930F1 NIH\_MGC\_96 Homo sapiens cDNA clone IMAGE:4792831 5',

BG714406.1 GI:13993337

mRNA sequence.

DEFINITION ACCESSION sapiens (human)

Homo H

VERSION KEYWORDS SOURCE ORGANISM

셤

ઠે

셤

요

δ

g

ò

පු

ઠે

```
1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AI809922 647 bp mRNA linear EST 19-DEC-1999 wf59g08.xl Scares NFL T GBC_S1 Homo sapiens cDNA clone IMAGE:2359934 3' similar to TR:077802 077802 ANGIOPOIETIN-2 ;, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081 ccrrccaacrrgaarggacagracraccacaaaaacagaaracaaaraagrrraacggr 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATC 1829
                                                                                                                                                                                                                                                                                                                                                                                    1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1112
                                                                                                                                                                              1169
                                                                                                                                                                                                                                                                                1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1290 TACTGTGACATGGAAGCTGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGATGGC 1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTACTCATTGTATGAACATTTCTAT 1529
                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                      099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACAAAATAAGTTCAACGC
                                                                                                                                                                              GAGACAGTTAATTAACTTACTGACTATGATGTCCACATCAAACTCAGGTAAGGACCC---C
                                                                                                                                                                                                           1021 AAATGCATCTGCAAGTGTTCCCAGATGCTCTCAGGAGGCTGGTGTTTGACGCATGTGGT
                          AAAATAGTGACTGCCACGGTGAATAATTCAGTTCTTCAAAAGCAGCAACATGATCTCATG
                                                                                                                            421 Aagcriegrigacaeccacegricaacaacricecricerricagaagcaecareaceraare
                                                                                                                                                                                                                                                                                  1170 ACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTGTGCTGAAGTATTCAAATCAGGA
                                                                                                                                                                                                                                                                                                          541 GCTATCCGTAAAGAAGAGAAACACCTTCAGAGACTGTGCGGAAATCTTCAAGTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                       CACACCACAAATGGCATCTACACGTTAACATTCCCTAATTCTACAGAAGAGATCAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661 racrereacaresacereseresaceaceseseses reserentes es racres de constante de const
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1410 GAATATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1530 CICICAAGIGAAGAACICAATIAIAGGATICACCITAAAGGACTIACAGGGACAGCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     creecregreaagaerecaacracagarreacerracaggaereacgggaecgcgggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGT
CGCCCAGCAGATTTCTAA 1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGACCAGCAGATTTCTAA 1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AI809922
AI809922.1 GI:5396488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1770
                                                                                                                                                                                   1113 (
                                                                                                                                                                                                                                                                                                                                                                                            1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                    1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AI809922/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                      셤
                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                               8
                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAATTCCATCATTGAAGAACTAGAAAAA 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSS 15-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAAGGTGCTAGCTATGGAAGACAAGCACATCATCCAACTACAGTCAATAAAAGAAGAG 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAAGTTCTGGACATGGAGGCCAAGCCAGCCAGCAGCTACAGTCCATGAAGGAGCAG 360
                                                                                                                                                           759
                                                                                                                                                                                                                                                                819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (basea 1 to 1218)
Clark, A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Reriaera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.
                                                                                                            547
                                                                                                                                                                                                              607
                                                                                                                                                                                                                                                                                                               667
          TCGGTGCAGAGGCTGCAAGTGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATG 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Trodd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Direct Submission
Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering
                                                                                       ATGCAGTACAGGACCAGACGGCTGTGATGATAGAAATAGGGACAAACCTGTTGAACAAA
                                                                                                                                                                                                                                                                                                CAGCCGAGCAAACGCGGAAGTTAACTGATGTGGAAGCCCAAGTATTACATCAGAGCACGA
                                                                                                                                                              ATGCAGTACAGAACCAGACGCTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAA
                                                                                                                                                                                                                                                                   CAGCTGAGCAAACGCGGAAGTTAACTGATGTGGAAGCCCAAGTATTAAATCAGACCAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGATTTTGGACCAGACCAGTGAAATAAACAAATTGCAAGATAAGAACAGTTTCCTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AY407060 1218 bp DNA linear GSS 15-DEC
Mus musculus ANGPT2 gene, VIRTUAL TRANSCRIPT, partial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٠,
۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.4%; Score 626; DB 9; Length 1218; 78.2%; Pred. No. 3.5e-161; ive 0; Mismatches 210; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                       695
                                                                                                                                                                                                                                                                                                                                                                  GACTIGAACTICAGCICTIGGAACACTC 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1218
/organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                               GACTIGAACTICAGCICTIGGAACAGIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="ANGPT2"
/locus_tag="HCM2764"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       based on alignment.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genomic survey sequence. AY407060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AY407060.1 GI:39763031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 Similarity
765; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 765
             428
                                                                                                            488
                                                                                                                                                              200
                                                                                                                                                                                                                548
                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                     809
                                                                                                                                                                                                                                                                                                                                                                       820
                                                                                                                                                                                                                                                                                                                                                                                                                       899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
AY407060
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

쉽 ò 음 **상** 

ઠ

```
1. .647
| Organism="Homo sapiens" |
| J. .647
| Organism="Homo sapiens" |
| Mol. Lype="MRNA" |
| Ab xref="taxon:9606" |
| Clone="INAGE:2359934" |
| Alb host="DH108" |
| Clone lib="Soares | NEL T GBC_S1" |
| Actone lib="Organ: pooled; Vector: pr773D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbH119W, testis NHT, and B-cell libraries libraries and solution from the deriver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M. A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 729096-731399. Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .848 ACATCCCAGTCCACCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCCAGTGCA 1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAATGTTATGTGCAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACA 2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGG 1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    287 TTAACGGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGC 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     227 AAAGATGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCA 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1180 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 455.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          647 TCACAAATGCTACCAGGAGGCTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               467 ACATCCCAGTCCACATGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAAAGTCACGGCTGCGCACTGTGTCCTTTCCACCACAGAGGGCGTGTGCTCGGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       407 CIGAAAGTCACGCCTGCGCACTGTCTCCTCCACCACAAGGGGGGTGTGCTCGGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           347 GACGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGATGAACCCGAGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACAAATGCTAACAGGAGGCTGGTTTTGATGCATGTGGTCCTTCCAACTTGAACGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACGGGACCCACATGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTAACGGACCAAAGCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 26.8%; Score 611.8; DB 1; Length 647; Best Local Similarity 99.7%; Pred. No. 2.4e-157; Matches 613; Conservative 0; Mismatches 2; Indels 0.
(bases 1 to 647)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     167
                      AUTHORS
TITLE
                                                                                             JOURNAL
COMMENT
REFERENCE
                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
107 ATACAGATCATCTTGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAAATACCC 48
                                       2268 ATATGTCCTGAATTC 2282
                                                           ATATGTCCTGAATTC 33
                                                           47
               g
                                       à
                                                       g
à
```

2208 ATACAGATCATCTTGGAACTGCATTCTTGAGCACTGTTTATACACTGTGTAAATACCC 2267

completed: July 29, 2005, 09:49:48 ne : 8071.43 secs time Search c Job time Sequence 3, Appli Sequence 460, App

Sequence 3,

Sequence 18, 1 Sequence 33, 1 Sequence 2, A

Sequence

Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

250, App 24, Appl 56, Appl 23, Appl 23, Appl 22, Appl 95, Appl 21, Appl 21, Appl

Sequence Sequence

US-09-998-833-3 US-10-101-510-460 US-10-317-803-18 US-10-317-803-18 US-10-887-272-33 US-10-887-759A-2 US-10-988-245-3 US-10-988-245-3 US-10-133-013-250 US-10-133-013-250 US-10-133-013-250 US-10-133-013-250 US-10-133-013-250 US-10-133-013-250 US-10-133-013-250 US-10-225-060-23 US-10-317-803-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-21 US-10-928-911-25 US-10-928-911-25 US-10-928-911-19 US-10-928-911-19

, Appl

Sequence

Sequence Sequence Sequence Sequence Sequence Sequence

Sequence

Sequence 19,

Sequence

Sequence

ALIGNMENTS

Sequence Sequence

```
Sequence 5, Application US/10179744
; Sequence 5, Application US/10179744
; Publication No. US20020173627A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Samuel et al.
; TITLE OF INVENTION: TIE-2 LIGANDS, METHODS OF MAKING AND USES THEREOF
; FILE REFERENCE: RG 330-F-PCT-US
; CURRENT APPLICATION NUMBER: US/10/179,744
; CURRENT APPLICATION NUMBER: US/08/817,318
; PRIOR APPLICATION NUMBER: US/08/817,318
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
: LENGTH: 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Unknown Organism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.C
Matches 2282; Conservative
22269
22269
222669
222669
222669
222669
222669
22269
22261
1200
1376
13376
13376
                                                                                                                                                                                                                                                                                                                                                          1491
1506
2424
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240825
240825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: CDS
; LOCATION: (357)...(1847)
US-10-179-744-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240825
                                                                                                                                                                                                                                                                                                                                          1491
RESULT 1
US-10-179-744-5
                                                                                                                                                                                                                                                                                                                                                                                                                                       1068.2
898.6
898.6
748.6
                                                                                                                                                       2233.6
2233.6
2233.6
2230.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          598
595.6
                                                              2269
2269
2269
2269
                                                                                                                                                                                                                         2219
2214.6
1290.6
1290.6
                                                                                                                                                                                                                                                                                                                                                                                                           1068.8
1068.8
                                                                                                                                                                                                                                                                                                                                          1140.
                                                                                                                                                                                                                                                                                                                                                                                             1068.
                                                                                                                                                                                                                                                                                                                                                                           1094.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Appli
Appli
Appli
Appli
Appli
                                                                                                             July 29, 2005, 02:51:04; Search time 2039.78 Seconds (without alignments) 7240.933 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, 2
                                                                                                                                                                                                               1 gaatteetgggttggtgttt......tacceatatgteetgaatte 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1: /cgn2 6/ptodata/1/pubpna/USO7 PUBCOMB.seq:*
2: /cgn2 6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
2: /cgn2 6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
4: /cgn2 6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
5: /cgn2 6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
5: /cgn2 6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
5: /cgn2 6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*
6: /cgn2 6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
7: /cgn2 6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
7: /cgn2 6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
7: /cgn2 6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                               14575566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seg:
                  5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-225-060-5
US-10-321-332-5
US-10-179-615-5
US-10-179-920-5
US-10-603-293-5
                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-179-744-5
US-10-186-817-5
                                                                                                                                                                                                                                                                                               7287783 segs, 3236178273 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                    GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published_Applications_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                  nucleic search, using sw model
                                                                                                                                                                                                                                              IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                             US-10-603-293-5
2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2282
2282
2282
2282
2282
2282
2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14.
115.
17.
19.
19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2282
2282
2282
2282
2282
2282
2282
                                                                                                                                                                                 fitle:
Perfect score:
                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                  nucleic
                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
No.
```

ö

Gaps

, 0

; 0

; Score 2282; D ; Pred. No. 0; 0; Mismatches

DB 13; Length 2282; Indels

~

CAGITCTICAAAAGCAGCAACAIGAICTCAIGGAGACAGITAAIAACTIACIGACTAIGA GAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACAT AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTGGGAAGGGAATG TGTCCACATCAAACTCAGCTAAGGACCCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA TGTCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA GAGACTGTGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACAT AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAAGG AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACAACTCAATTATAGGATTC ACCTTAAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG ACCTTAAAGGACTTACAGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA ATTTTAGCACAAAGGATGGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA CAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCAC CCTGAGGAACTGTCTCGAACTATTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG CCTGAGGAACTGICTCGAACTATTTTCAAAGACTTAAGCCCCAGTGCACTGAAAGTCACGG CTGCGCACTGTGTCCTTCCACACAGAGGGGGTGTGCTCGGTGCTGAGGGGCCACA CTGCGCACTGTGTCCTCTTCCACCACAGAGGCGTGTTCTCCGGTGCTGACGAGACCCACA TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA GCAAGACCCTAAAACATCCATAATTGTGATTAGACAGAAACACCTATGCAAAGATGAAACCCG AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAACCAAGAATGTTATGTG CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAAT **AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT** AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT ATTOGCTCAAGGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA ATTCGCTCAAGGCCACAACCATGATCCCAACCAGCAGATTTCTAAACATCCCAGTCCA recrecagarradageergraaacrrrareacrraaacrrecareacrraacegaeeaaa GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG

පු

ઠ 요 δ

```
1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                          600
                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                     AACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                            540
                                                                                            900
                                                                                                                                                          9
                                                                                                                                                                                         99
                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441 BACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAAAATTCCATCATGAAGAACTAGAAAAAAAAAATAGTGACTGCCACGGTGAATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTICITCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGACTGTGCTGAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601 TGCTGGAGAACATCATGGAAAAAAAACAACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                        TAACTGATGTGGAAGCCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                        ACATCATCCAACTACAGTCAATAAAAGAAGAAGAAGATCAGCTACAGGTGTTAGTATCCA
TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                   TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                         AGGACAACATGAAGAAAGGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                       CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGAACGCGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1441
                                 481 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
   121
                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                           요
                                                                                                                                                               8
                                                                                                                                                                                         g
                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                       셤
                                                                                        ò
                                                                                                                                                                                                                             ò
                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCTCGGGACTC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Acegacccaeccarecaeceraceracccreceracerrecaeaecaecrecesaere 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCGGAAGAGCATGGACAGCATAGGAAAGAAGAAGATATCAGGTCCAGGATGGGTCCTGCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATTCCTGGGTTGGTGTTATCTCCTCCCAGCCTTGAGGGGGGGAACAACACTGTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGGGGAGGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                of Making and Uses Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 2282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 2282;
100.0%; Pred. No. 0;
:ive 0; Mismatches
                                                                                                                                                                                           | Sequence 5, Application US/10186817 | Publication No. US20030040463A1 |
| Publication No. US20030040463A1 |
| GENERAL INPORMATION: | APPLICANT: Davis, Samuel et al. |
| TITLE OF INVENTION: Tie-2 Ligands, Methods of FILE REFERENCE: REG 330-G-FOT-US |
| CURRENT FILING DATE: 2002-07-01 |
| PRIOR APPLICATION NUMBER: US/08/930,721 |
| PRIOR APPLICATION NUMBER: PCT/US96/04806 |
| PRIOR FILING DATE: 1996-03-10 |
| PRIOR FILING DATE: 1996-04-05 |
| PRIOR FILING DATE: 1995-06-06 |
| PRIOR FILING DATE: 1995-06-06 |
| PRIOR FILING DATE: 1995-06-06 |
| PRIOR FILING DATE: 1996-04-05 |
| NUMBER OF SEQ ID NOS: 6 |
| SEQ ID NO 5 |
| PUBLICATION NUMBER: OFFICE 
                                                                                                                                                                                                                                                                Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 2282; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (357)..(1844)
US-10-186-817-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                   TC 2282
                                                                                                                   ŤĊ 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                     2281
                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
```

셤

ò

δ Q ⋧

g

8 8

8 6 8 6

8 8

ઠે

ö

Gaps

180

240 240 300

180

120

9

120

```
121 CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                181 AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781 TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                          ACGGACCCAGCCATGCCAGCGTAGCAGCCCTGCGTTTCAGACGCCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                         ACGGACCCAGCCATGGCAGCGTAGCAGCCTGCGTTTCAGACGGCAGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCAGATTGTTTTTTTTTCTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361 GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTTGGCCGAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421 TTCGGAAGAGCATGGACATAGGAAAGAAGAAGAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAATGCTGTGCAGAGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTGGAGAACATCATGGAAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTGATGATAGAAATAGGGACAAAACCTGTTGAACCAAACAGCTGAGCAAACGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 AACACTCCCTCTCGACAAACAAATTGGAAAAAACACATTTTGGACCAGACCAGTGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                    aacacagcagtaaaaaccaggtttgctactggaaaaagaggaaagagaaagactttcattg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGGCAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACACTCCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA
                                                                                                                                             ;
                                                                                                                   Length
                                                                                                                                             0; Indels
                                                                                                                   14;
                                                                                                                   DB
                                                                                                               100.0%; Score 2282;
100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                Query Match 100.
Best Local Similarity 100.
Matches 2282; Conservative
; TYPE: DNA; GOGANISM: Homo sapiens; FRATURE: ; NAME/KEY: CDS; COCATION: (357)...(1844); OTHER INFORMATION: US-10-225-060-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                          Н
                                                                                                                                                                                                   н
                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                g
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 상
임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                    1800
                                                                                                                                                                                                                                                1860
                                                                                                                                                                                                                                                                             1860
                                                                                                                                                                                                                                                                                                        1920
                                                                                                                                                                                                                                                                                                                                                                                                                         2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2040
                                                                                                                                                                                                                                                                                                                                                                                           1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/10225060
Fublication No. US20030092891A1
GENERAL INFORMATION:
TITLE OF INVENTION: Expressed Ligand - Vascular Intercellular Signaling
TITLE OF INVENTION: Molecule
TITLE OF INVENTION: Molecule
FILE REPERENCE: REG 333-Z
CURRENT FILING DATE: 2002-08-21
PRIOR PPLICATION NUMBER: US/09/709,188
PRIOR PPLICATION NUMBER: US/09/709,188
PRIOR PILING DATE: 2000-11-09
PRIOR APPLICATION NUMBER: 08/740,223
PRIOR FILING DATE: 1996-11-05
PRIOR PLING DATE: 1996-11-05
SPETWARE: Patentin Version 3.1
SSOTWARE: Patentin Version 3.1
; SSOT ID NO 5.
                               1561 ACCTTAAAGGACTTACAGGGACAGCCGGCAAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                     ATTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA
                                                                                                                                                                                                      1741 AGAGGCAGAACACAAATAAGTTCAACGCCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                                                                                                                                                                                                                                               1801 ATTCGCTCAAGCCACAACCATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA
                                                                                                                                                                                                                                                                                                                       CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                          1981 TGCTCCAGATTAGAGCCTGTAAAACTTTATCACTTAAAACTTGCATCACTTAACGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACAAGAATGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGTTTATCAGTAAATAACTGGAAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2221 TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT
                                                                                                 1621 ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA
                                                                                                                              CAGGAGGCTGGTGTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC
                                                                                                                                                         caddadgeregregringargeargregrecriccaacrigaacggaargracrarccae
                                                                                                                                                                                                                                                                                                        CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                CTGCGCACTGTGTCCTCTTCCACACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                CTGCGCACTGTGTCCTCTTCCACACAGAGGGCGTGTGCTCGGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT
                                                                                                                                                                                       AGAGGCAGAACACAAATAAGTTCAACGCCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                                                                                                                                                                                                                                ATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TC 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-10-225-060-5
                                                                      1621
                                                                                                                            1681
                                                                                                                                                           1681
                                                                                                                                                                                       1741
                                                                                                                                                                                                                                               1801
                                                                                                                                                                                                                                                                                                       1861
                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                1921
                                                                                                                                                                                                                                                                                                                                                                                                                       1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2281
                1561
                                                                                                                                                                                                                                                                                                                                                                                           1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2281
               8 6
                                                             8 6
                                                                                                                      ò
                                                                                                                                                g
                                                                                                                                                                             ð
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                    8 S
                                                                                                                                                                                                                                                                                                                         6 B
                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

480

540 540 9 909 9 99 720 720 780 780

420 420 480 840 840

DB   1981 TGCTCCAGATTAGACCTGTAAACTTTATCACTTAAACTTAACGGACCAAA 2040	RESULT 4 US-10-321-332-5 Sequence 5, Application US/10321332 Sequence 5, Application No. US20030109677A1 GENERAL INFORMATION: APPLICANT: Davis, et al. TITLE OF INVENTION: THEREOF NUMBER OF SEQUENCES: 6 CORRESPONDENCE 16 CORRESPONDENCE ADDRESS: ADDRESSE: Receneron Pharmaceuticals, Inc.	STREET: 777 Old Saw Mill River Road CITY: Tarrytown STATE: New York COUNTRY: USA ZIP: 10591 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS MEDIUM TARRES PATENTIN Release #1.0, Version #1.30	CURKENI AFPLICATION NUMBER: US/10/321,332  FILING DATE: 17-Dec-2002  CLASSIFICATION ACURENCE: CLASSIFICATION DATA:  PRIOR APPLICATION DATA:  APPLICATION NUMBER: US/08/373,579  FILING DATE: 17-JAN-1995  FILING DATE: 17-JAN-1995  FILING DATE: 09-DEC-1994  APPLICATION NUMBER: US 08/348,492  FILING DATE: 02-DEC-1994  APPLICATION NUMBER: US 08/330,261  FILING DATE: 27-OCT-1994  APPLICATION NUMBER: US 08/330,361	HILING DATE: 07-CT-1994  ATTORINI MABE: 07-CT-1994  NAME: CODET, ROBET U. REGISTRATION NUMBER: REG 330-D TELEPHONE: (914) 345-740  TELEPHONE: (914) 345-772  INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS: LENGTH: 2282 base pairs TELNGTH: 2282 base pairs TOPOLICIS acid STRANDEDNESS: aningle TOPOLICIS acid TOPOLICIS: unknown MOLECULE TYPE: DNA (genomic)
	1261 TCCCTAATTCTACAGAAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGGT 1320			1801 ATTCCCTCAAGGCCACAACCATGATCATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860
8 6 8 6 8 6 8 6 8	3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6 6 6 6 6 6	6 6 6 6 6 6 6

ð ద 6

8 8 8 8 8 8

g & 엄

8 6 8 6

6 8 6 8 6 8 6 8 6 8 6

a

```
1020
                  1020
                                       1080
                                                           1080
                                                                                1140
                                                                                                   1140
                                                                                                                      1200
                                                                                                                                                                                  1260
                                                                                                                                                                                                      1320
                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                    1440
                                                                                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                            1500
                                                                                                                                                                                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1980
                                                                                                                                         1200
                                                                                                                                                               1260
                                                                                                                                                                                                                         1320
                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                                                                                                                                1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCAC 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2100
                                                                                                                                                             ACATCCAACTACAGTCAATAAAAGAAGAAAGAAGATCAGCTACAGGTGTTAGTATCCA
                                                 1021 AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAAAATAGTGACTGCCACGGTGAATAATT
                                                                                        TGTCCACATCAAACTCCAGCTAAGGACCCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA
                                                                                                                                                                                                                                                        GGACAATTATTCAGCGACGTGAGGATGGCGTGATTTTCAGAGGACTTGGAAAGAAT
                                                                                                                                                                                                                                                                                                                                        AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTTAPARGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCGCACTGTGTCCTCTTCCACACAGAGGGGGTGTGCTCGGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGCGCACTGTGTCCTCTTCCACCACAGAGGGGTGTGCTCGGTGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCCACATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA
                                                                                                                                                                                                     TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGAGGCGGGT
                                                                                                                                                                                                                                                                                                                             AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTGGGAAGGGAATG
                                                                                                                                                                                                                                                                                                                                                                     AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC
                                                                                                                                                                                                                                                                                                                                                                               AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC
                                                                                                                                                                                                                                                                                                                                                                                                            ACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCCAGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG
                                                                                CAGTTCTTCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGA
                                                                                                                                                                                                                 CAGGAGGCTGGTGTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGGCAGAACACAAATAAGTTCAACGCCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                       1021
                                                                                                   1081
                                                                                                                                           1141
                                                                                                                                                                                  1201
                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1921
                   961
                                                                               1081
                                                                                                                       1141
                                                                                                                                                              1201
                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1981
 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2041
           셤
                                     8 6 8 6
                                                                                                                    8 8
                                                                                                                                                                            8 & 8
                                                                                                                                                                                                                                     8
8
                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                           원 장
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                     ö
                                                                                                                                                                      180
                                                                                                                               TCTGGGGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC 120
                                                                                                                                                  120
                                                                                                                                                                                           180
                                                                                                                                                                                                               240
                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                        9
                                                                                                            9
                                                                                                                                           AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAAGAGGAAAGAGAAAGACTTTCATTG
                                                                                                                                                                                                                                                    GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCACCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAATGCTGTGCAGAGGGACGCGCCCTCGAATACGATGACTCGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAAGTGAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                               AACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTG
                                                                                                                                                                                                                                                                                                                                     GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCGGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                 GCCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                           TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                       CCAATGCTGTGCAGAGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAATTGCAAGATAAGAACAGTTTCCTAGAAAAGAAGGTGCTAGCAAGAAGACAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                     GCTACACTTTCCTCCTGCCAGAGATGGACAGCTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTTGGACCAGACCAGTGAAATAA
                                                                     Gaps
                                                                     ö
                                                 Length 2282
                                                                    Indels
                                                 DB 15;
                                                                    ;
                                                ; Score 2282; I; Pred. No. 0; 0; Mismatches
                  ë
NAME/KEY: CDS

LOCATION: 357..1847

SEQUENCE DESCRIPTION: SEQ ID
US-10-321-332-5
                                                Query Match
Best Local Similarity 100.0%;
Matches 2282; Conservative 0;
                                                                                                                                61
                                                                                                                                                                      121
                                                                                                                                                                                                              181
                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
```

B & B & B & B & B

361 GGCAGATTGTTTTGTTTACTCTGAGCTGTCATCTTTGCCCGCAGCCTATAACAACT 420  361 GGCAGATTGTTTTCTTTACTCTGAGCTGTCATTGTCTTTGCCGCGCGCCCTATAACAACT 420  421 TTCGGAAGAGCATGGACAGCATATCTTGTCTTGTCCAGCCCTATAACAACT 420  421 TTCGGAAGAGCATGGACAGCATAAGGAAAGAAGAACAATATCAGGTCCAGCCTTGCA 480  481 GCTACACTTTCCTCCTGCCAGAGATGGACAATATCAGGTCCAGCCCTACGTGT 540  481 GCTACACTTTCCTCCTGCCAGAGATGGACAACAACGCCTTCCTCCAGCCCCTACGTGT 540  481 GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT 540  541 CCAATGCTGCAGAGGACGCCGCTCGAATACGATGCTCTTCCTCCAGCCCTACGTGT 540  541 CCAATGCTGCAGAGGACGCCGCTCCGAATACGATGCTCTTCCTCCAGAGGCTGCAAG 600  541 CCAATGCTGCAGAGGACGCCGCTCCGAATACGATGCTCTTCGTGCAGAGGCTGCAAG 600  541 CCAATGCTGCAGAGACGCCCCCTCCAATACGATGAAGCTTCGAGAATATAATATCC 660	TGCTGGGGACTTCATGGAAACAACCACTCAGTGGCTAATGAAGCTTCAGGATTATATCC 660 TGCTGGGGAACATCATGGAAACAACCACTCAGTGGCTAATGAAGCTTCAGGAATTATATCC 660 AGGACAACATGAAGAAAGAAATGGTAGAATACAGCAGAATGCAGTACAGAACCAGACGG 720 AGGACAACATGAAGAAAGAAATGGTAGAGTACAGAATGCAGTACAGAACCAGACGG 720 CTGTGATGATGAAAAATAGGAAAACTGTTGAACCAAACAGACTGAGACAAGCGGAAGT 780 CTGTGATGATGAAAATAGGACAAACCTGTTGAACCAAACAGCTGAAACGCGGAAGT 780 TAACTGATGTGGAAAATTAAATCAGACCACAGACTTGAACTTCAGCTCTTGG 840 TAACTGATGTGGAAAAATTAAATCAGACCACAGACTTGAACTTCAGCTCTTGG 840 TAACTGATGTGGAAAAAAAAAACAGAATTTTGGACTAGACTTCAGCTCTTGG 840 AACACTCCCTCTCGACAAAAAAAAACAGAATTTTGGACTAGAACAAAAA 900 ACAAATTGCAAAATAAGAACAAAAAAAAAAAAAAAAAAA	1021 AGCAAAATTCCATCATTGAAGAACAAAAAATAGTGACTGCACGGTGAATAATT 1080 1021 AGCAAAATTCCATCATTGAAGAACACAAAAAAAAAAAAA
8 8 8 8 8 8 8 8	8 6 8 6 8 6 8 6 8 6 8	5 B 5 B 5 B 5 B 5 B 5 B 5
2100 2160 2160 2220 2220 2280		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	KING AND USES THEREOF	100.0%; Score 2282; DB 16; Length 2282; conservative 0.%; Pred. No. 0. 0.  Conservative 0. Mismatches 0; Indels 0; Gaps of Conservative 0; Mismatches
	10179615 57A1 : al. IIGANDS, METHODS OF MAI PCT - US/10/179, 615 06-24 1S/08/817,318 16 owe Version 3.0 ence	100.0%; Score 2282; DB 16; Length 2282; Similarity 100.0%; Pred. No. 0; O; Indels O; Conservative O; Mismatches O; Indels O; Indels O; Conservative O; Mismatches O; Indels
	2281 TC 2282  LT 5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-5  10-179-615-7  10-179-615	### 100.0%;  ### 1

8 6 8 6 8 6 8 6 8 6

ω

ö

යි යි

원 à g ò g ò g 8 8

ò d ò 셤 à 8 8

```
180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841 AACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA 900
                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                 CCAAGTGAGCAGGACTGTTCCCCACTGCAATCTGACAGTTTACTGCCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                 CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGACGTGTGTTTGCCCTCAAGTTTGCTAAGCTGGTTTTTTACTGAAAGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAATGCTGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATTCCTGGGTTGTTTATCTCCTCCCAGCCTTGAGGGAACAACAACAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                            ACGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGCCAGCAGCTCGGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCGGAAGACATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTACACTTTCCTCCTGCCAGAGATGGACACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAATGCTGTGCAGAGGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGGGGAGAGAAGAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGATTGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCGG
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                  Length 2282;
                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                               Indels
                                                                                                                                                                                   16;
                                                                                                                                                                                                              .;
0
                                                                                                                                                                                   DB
                                                                                                                                                                                100.0%; Score 2282;
100.0%; Pred. No. 0;
iive 0; Mismatches
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
; TENGTH: 2282
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Unknown Organism
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (357)...(1847)
US-10-179-820-5
                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 2282; Conservative
                                                                                                                                                                                                                                                                         ч
                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                              1740
                                                                                                                                                                                                 1680
                                                                                                                                                                                                                                                                                                                    1800
                                                                                                                                                                                                                                                                                                                                                                               1860
                                                                                                                                                                                                                                                                                                                                                                                                             1920
                                                                                                                                                                                                                                                                                                                                                                                                                                         1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2040
1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2280
                                                                                                        ACCITAAAGGACITACAGGGACAGCCGGCAAAAIAAGCAGCAICAGCCAACCAGGAAAIG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCTTACTCATTGTATGAACATTTCTATCTCTCAGTGAAGAACAATTATAGGATTC
                                                                                                                           ACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                                                                                                                                           ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA
                                                                                                                                                                                                                                                                                                         AGAGGCAGAAACAAAATAAGTTCAACGCCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                 CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCGCACTGTGTCCTCTTCCACACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAAGACCCTAAACATCCATAATTGTGTTAGACAGAACACCTATGCAAAGATGAACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2161 CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                              AGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC
                                                                                                                                                                    ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA
                                                                                                                                                                                                                                                           CAGGAGGCTGGTGTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC
                                                                                                                                                                                                                                                                                                                                                                                                           CCTGAGGAACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCGCACTGTGTCCTCTTCCACCACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTCCAGATTAGAGCCTGTAAACTTATCACTTAAACTTGCATCACTTAAACGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAGACCCTAAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGTTTATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT
                                                                                                                                                                                                                              CAGGAGGCTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCAC
                                                                                                                                                                                                                                                                                      AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                 ATTCGCTCAAGGCCACAACCATGATCATCCGACCAGCAGATTTCTAAACATCCCAGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-10-179-820-5
US-10-179-820-5
Sequence 5, Application US/10179820
Publication No. US20030166858A1
GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REFERENCE: REG 330-7-PCT-US
CURRENT FILING DATE: 2002-06-24
PRIOR APPLICATION NUMBER: US/10/179,820
CURRENT FILING DATE: 1999-09-16
NUMBER OF SEQ ID NOS: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TC 2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _말
                                                                         1501
                                                                                                        1561
                                                                                                                                    1561
                                                                                                                                                                    1621
                                                                                                                                                                                              1621
                                                                                                                                                                                                                                                          1681
                                                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                             1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2101
                 1441
                                              1501
                                                                                                                                                                                                                            1681
                                                                                                                                                                                                                                                                                                                                                 1801
                                                                                                                                                                                                                                                                                                                                                                                                           1861
                                                                                                                                                                                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1921
```

g ò g qq

ર્જ

g

8

g

8 6

us-10-603-293-5.rnpb

1261 1321 1321 1381 1381 1441 1501		1681 CAGGAGCTGCTGGTTGATGCATGTGCTTCCAACTTGAACGGAATGTACTATCCAC  1741 AGAGGCAGAACACAAATAAGTTCAACGCATTAAATGGTACTAGGAAAGGCTCAGGCT  1741 AGAGGCAGAACACAAATAAGTTCAACGCATTAAATGGTACTACTGGAAAGGCTCAGGCT  1741 AGAGGCAGAACACAATAAGTTCAACGCATTAAATGGTACTACTGGAAAGGCTCAGGCT  1801 ATTCGCTCAAGGCCACAACCATGATGTTCTAAATCGTATTCTAAACATCCAGTCCA  1801 ATTCGCTCAAGGCCACAACTATTTCAAAGACTTAAAGCCAGTGCA  1861 CCTGAAGGAACTATTTCAAAGACTTAAGCCAGTGCAGTG		Db 2041 GCAAGACCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCG  Qy 2101 AGGCTGAGAATTCACACATTACAGACGCTGCTGTCACACCAACAGAATTATGTG  Db 2101 AGGCTGAGAATTCACACATTTACAGACGCTGCTGTCACAACCAAGAATTATGTG  Qy 2161 CAAGTTTATCAGTAAATAACTGGAAACACATTATGTTATACACACAC
ACGACCCAGCATAAAAACCAGGTTTGCTACTGGAAAAAGAGGAAAGAGAAGACTTTCATTGACCAGCACCAGCACAGCAAAAAAAA	8 4 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	TATCC GACGG GACGG GACGG GACGC GAAGGT CAAGGT CAAGGT	900 900 960 1020	

```
1080
                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1800
                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                    1080
                                                                                                                                                                                                                                                                                                                                                                              1081 CAGTTCTTCAAAAGCAGCAACATGATCTCATGAGACAGTTAATAACTTACTGACTATGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                          1141 TGTCCACATCAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAAT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                            780
                                                                                      840
                                                                                                                 840
                                                                                                                                            900
                                                                                                                                                                     900
                                                                                                                                                                                                960
                                                                                                                                                                                                                          960
         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501 AGCCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCTTAAAGGACTTACAGGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCITTAAAGGACTIACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGAGGCTGGTTTGATGCGTGTGTGTCCTTCCACTTGAACGGAATGTACTATCCAC
                                                                                                                                                                                                                                                                    GAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACACGTTAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621 ATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAA
                                                                                                                                                           961 ACATCATCCAACTACAGTCAATAAAAGAAGAAGAAAAGATCAGCTACAGGTGTTAGTATCCA
                                                                                                                                                                                                                                                                                                                           CAGTICITCAAAAGCAGCAACATCATCTCATGGAGACAGTTAATAACTTACTGACTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321 GGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aggacaacatgaagaaaatggtagagatacagcagaatgcagtacagaaccagaaccagacgg
                                                   781 TAACTGATGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGG
                                                                                                      AACACTCCCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAA
                                                                                                                                                                                                AGCAAAATTCCATCATTGAAGAACTAGAAAAAAAAAATAGTGACTGCCACGGTGAATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCCACATCAAACTCAGCTAAAGACCCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCA
                                   CTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGGCAAACGCGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1741
                                                                                                                                               841
                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1261.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1681
                                                                                                                                                                                                  901
                                       721
            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                            요
                                                                                                                 셤
                                                                                                                                                                      g
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                         8
                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTACACTITICCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAATGCTGTGCAGAGGCACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccaasrgascassacrerreceaerscaarcrsacasrrracrscarscerssassas 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCA 480
                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTGGAGAAACATGGAAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCTGGAGAACATGAAAAAAAAAACAACTCAGTGGCTAATGAAGCTTGAGAATTATATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661 AGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAAGTGAGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aacacagcagtaaaaaccaggtttgctactggaaaaagaggaaagagaagactttcattg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGATTGTTTTTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTACACTTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGT
                                                                                                                                                                                                                                                                                                                                                                                                   TCTGGGGAGGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGGACCCAGCCATGCCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCTCGGGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGACGTGTTTTGCCCTCAAGTTTGCTAAGCTGCTGCTGTTTATTACTGAAGAAGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGGCCGCAGCCTATAACAACT
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                           Length 2282;
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                      Indels
                                 SEREMAL INFORMATION:
SEREMAL INFORMATION:
APPLICANT: Vancopoulos, George D.
TITLE OF INVENTION: Expressed Ligand - Vascular
TITLE OF INVENTION: Expressed Ligand - Vascular
TITLE OF INVENTION: Expressed Ligand - Vascular
TITLE OF INVENTION: Intercellular Signaling Molecule
FILE REFERENCE: REG 333X
CURRENT APPLICATION NUMBER: US/10/925,060
PRIOR FILING DATE: 2004-08-27
PRIOR FILING DATE: 2002-08-21
PRIOR FILING DATE: 2000-11-09
PRIOR FILING DATE: 1996-10-25
NUMBER OF SEQ ID NOS: 30
SOFTWARE: FastERQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 2282
                                                                                                                                                                                                                                                                                                                             21;
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 2282; Best Local Similarity 100.0%; Pred. No. 0; Matches 2282; Conservative 0; Mismatches
Sequence 5, Application US/10928911
Publication No. US20050106099A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                  US-10-928-911-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
```

8 6 6 6

6 6 6

셤

셤

a

8

g

δ

ద ઠે

ઠે

셤 Š

ઠ

8 & 8

	24 24		301 GIGTTTGCCCTCAAGTTTGCTAAGCTGCTGTTTATTACTGAAGAAGAATGGCGAGAT 360 368 IGTTTTATTACTCAGGTGTGATCTTGCCCGCACATTAACAACTTTGGAAA 427	361 IGITITICITIACTUGAGUCIGAICITICITIGAGCGAGCCTATAACAACTITICAGAA 420 428 GAGCATGGACAGGAAAAAAAAAAAAAAAAAAAAAAAAAA	421 GAGCATGGACAGCATAGGAAGCAATATCAGGTCCAGCATGGACCCTGCAGCTACAC 480 488 TTTCCTCCTGCCAGATGGACACACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC 547	481 TTTCTCCTGCCAGAGATGGACTGCTCTTCTCCAGCCCTACGTGTCCAATGC 540 548 TGTGCAGAGGACGCGCCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA 607	541 TGTGCAGAGGGACGCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA 600 608 GAACATCATGGAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 667	601 GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 660 668 CATGAAGAAAGAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727 661 CATGAAGAAAGAAAGGATACAGCAGAATGCAGTACAGAACCAGAACCAGACGGCTGTGAT 720		788 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC 847 181 TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC 840	848 CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGAGCAGTGAAATAAACAAATT 907 	908 GCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGCTA	968 CCAACTACAGTCAATAAAAGAAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1027 	2 2	1088 TCAAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATGTCCAC 1147 	1148 ATCAAACTCAGGTAAGGACCCCACTGTTGCTAAAGAAGAAGAAGAATCAGCTTCAGAGACTG 1207
op ov	S & S	영 장	9 &	g &	qa X	g &	අ ඊ	<del>ያ</del> ያ	δ q	ଧ ଶ	čo q	λό G	\$ g	vo da	<i>&amp;</i> 4	à a à
b 1741 AGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCT 1800  V 1801 ATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCA 1860	ATTUGUTURANGUCUALARUCHANGACURACHANTITUTARANGICUA CUTGAGGAGAGAGACUCA CUTGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	H H	y 1981 IGCTCCAGATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAA 2040 	y 2041 GCAAGACCCTAAACATCCATAATTGTGATTAGACAGAACCCCTATGCAAAGATGAACCCG 2100 	y 2101 AGGCTGAGAATCAGACTGACAGTTTACAGACGCTGCTGTCACAAGAATGTTATGTG 2160 	y 2161 CAAGTTTATCAGTAAATAACTGGAAACAGAACACTTATGTTATACAATACAGATCATCT 2220 	y 2221 IGGAACTGCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCTGAAT 2280	7 2281 fc 2282 	SSULT 9 3-09-998-331-3 Sequence 3, Application US/09998831 Patent No. US20020119153A1	GENERAL INFORMATION: APPLICANT: Philip E. Thorpe APPLICANT: ROLf A. Brekken IITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY	TITLE OF INVENTION: INHIBITING VEGF FILE REFERENCE: 4001.002584 CURRENT APPLICATION NUMBER: US/09/998,831 CURRENT FILING DATE: 2001-11-30	PRIOR APPLICATION NUMBER: 09/561,108 PRIOR FILING DATE: 2000-04-28 NUMBER OF SEQ ID NOS: 44 SOFTWARE: Patentin Ver. 2.0	LENGTH: 2269 TYPE: DNA OGANISM: Homo sapiens	Z B B	CCCAGCCTTGAGGGGGGGAACAACACTGTGGGATCTGGGG 67	AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACAGCCCTCCCAAGTG

26 G G

```
540
                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248 CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCAGCTCGGGACTCTGGACGT 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTAAAAACCAGGTTTGCTACTGGAAAAAGAGAAAAGAGAAGACTTTCATTGACGGACC 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAACACACA 187
                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 CAGCCATGGCAGCGTAGCAGCCCTGCGTTTCAGACGGCAGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCATGGACAGCATAGGAAAGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACATCATGGAAAACAACACTCCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GIGTITIGCCCTCAAGTTTGCTAAGCTGCTGGTTTATTACTGAAGAAGAAGAATGTGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTCCTCCTGCCAGAGATGGACAACTGCCGCTCTTCCTCCAGCCCCTACGTGTCCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGGGTTGGTGTTATCTCCTCCCAGCCTTGAGGAGGAACAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGCAGAGGGACGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGCAGAGGGACGCGCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                               8 TEGETTEGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                      Gaps
US-09-998-833-3
; Sequence 3, Application US/09998833
; Sequence 3, Application US/09998833
; Publication No. US20030082187A1
; GENERAL INFORMATION:
    APPLICANT: THORPE, PHILIP E.
    APPLICANT: RAN, SOPHIA
    TITLE OF INVENTION: CANCER TREATMENT METHODS USING ANTIBODIES TO TITLE OF INVENTION: AMINOPHOSPHOLIPIDS
    FILE REFERENCE: 4001.002200
; CURRENT FILING DATE: 2001-11.30
    PRIOR APPLICATION NUMBER: US/09/351,543
    PRIOR FILING DATE: 1999-07-12
    NUMBER OF SEQ ID NOS: 5
    SEQ ID NO 3
    SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                   ö
                                                                                 ဥ
                                                                                                                                                                                                                                                                                        Length 2269
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                           10;
                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                          Query Match 99.4%; Score 2269; I Best Local Similarity 100.0%; Pred. No. 0; Matches 2269; Conservative 0; Mismatches
                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                        LENGTH: 2269
TYPE: DNA
                                                                                                                                                                                                                                                                US-09-998-833-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 B 8
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAAGCAAGAC 2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT 2220
                                                                                                                                                                                    1440
                                                                                                                                                                                                            CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACACAAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTGTCCTCTTCCACACACAGAGGCGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG 1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1927
    TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT 1387
                                                                                                                                                                                                                                                                                                                                                    AGGACTTACAGGGACAGCCGGCAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATCAGACTGACAGTTTACAGACGCTGCTGTCACAACCAAGGAATGTTATGTGCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT
                                                             CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATTAGAGCCTGTAAACTTTATCACTTAAACTTGCATCACTTAACGGACCAAGAAGAACA
                                                                                                                                                       CTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAA
                                                                                                                                                                                                                                                                                                                         AGGACTTACAGGGACAGCCGGCAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTAAACATCCATAATTGTGATTAGACAGAACACCTATGCAAAGATGAACCCGAGGCTGA
                                             TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT
                                                                                                                  TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTTCAGAGGACTTGGAAAGATATAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAITCTTCTCAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276
                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2168
                                                                                                    1328
                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                           1568
                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                  1628
                                                                                                                                                                                                                                                                                                                                                                                                                                       1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2221
                     1201
                                                1268
                                                                                                                                                                                                                                                                      1508
                                                                                                                                                            1388
```

g

요

8 B 8

8 8 8

g

8 8

ŝ

g

ò

셤

ઠે

임

ઠે

g

8

6 6 6 6

ઠે

a

දු ද

g

8

8

ઠે

ઠે

	RESULT 11   US-101-160   US-101-160   US-101-161-160   US-101-161-160   US-101-161-160   US-101-161-160   US-101-161   U
	1208   TGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCACCGTAAACTTCCCTAA   1201   1201   1301

8 6 8 6 8 6 8 6 8 6

8 6 8 6

1311	RESULT 12 US-10-373-561-3 ; Sequence 3, Application US/10373561 ; Publication No. US20030175276A1 ; GENERAL INFORMATION: ; APPLICANT: Philip E. Thorpe ; APPLICANT: Rolf A. Brekken ; TITLE OF INVENTION: ANTIBODY METHODS FOR SELECTIVELY INHIBITING VEGF ; FILE REFERENCE: 4001.002582
14.0   CACCUTCCACCCCCCCCCCCTTTCACACCCCCCCCCCCC	1208 TGCTGAAGTATTCAAATCAGACACACACAAATGGCATCTACACGTTAACATTCCCTAA 1267

```
1147
                                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                                                                                                                   1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1800
                                                                                               1027
                                                                                                                    1020
                                                                                                                                         1087
                                                                                                                                                            1080
                                                                                                                                                                                                                         1207
                                                                                                                                                                                                                                    1267
                                                                                                                                                                                                                                                                                     1260
                                                                                                                                                                                                                                                                                                          1327
                                                                                                                                                                                                                                                                                                                                                  1387
                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                           1447
                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1927
                                                      967
              907
                                  900
                                                                           960
                                                                                                                                                                                CCAACTACAGTCAATAAAAGAAGAGAAAGATCAGCTACAGGGGTTTAGTATCCAAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841 CCTCTCGACAAACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAAACAAATT
                                                       TTCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                                                                            TGCTGAAGTATTCAAATCAGGACACACACACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                         TTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAAT
                                                                                                                                                                                                                                                                                                                    1441 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCACACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCATCATTGAAGAACTAGAAAAAAAAAGTGACTGCCACGGTGAATAATTCAGTTCT
                                                                                                                                                                                                                         ATCAAACTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTG
                                                                                                                                                                                                                                                                 TGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACATTCCCTAA
                                                                                                                                                                                                                                                                                                                                                  TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGT
                                                                                                                                                                                                                                                                                                                                                              TATTCAGCGACGTGAGGATGGCGTTGATTTTCAGAGGACTTGGAAAAAATATAAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACAAAGGATGGAGACAACGACAAAATGTATTTGCAAAATGTTCACAAAATGCTAACAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGGTTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTATCCACAGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACACAAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                     TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA
                                                                                                                                         1028
                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                 1208
                                                                                                                                                                                                                                                                                                                              1261
                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
               848
                                                       908
                                                                            901
                                                                                               968
                                                                                                                    196
                                                                                                                                                                                                                         1148
                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                          1268
                                                                                                                                                                                                                                                                                                                                                   1328
                                                                                                                                                                                                                                                                                                                                                                                           1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1808
                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                     1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1868
                             g
                                                     ò
                                                                     셤
                                                                                          ð
                                                                                                                 В
                                                                                                                                        8 8
                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                       Ω
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                  68 AGAGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACAGCCCTCCCAAGTG 127
                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                          128 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGACACAG 187
                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                    367
                                                                                                                                                                                                                                                                                                                                                                                                                427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        847
                                                                                                                                                                                            67
                                                                                                                                                                                                              9
                                                                                                                                                                                                      TGGGTTGGTGTTTTATCTCCTCCCCAGCCTTGAGGGAACAACACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                               61 AGAGAGGAACAAAGGACCGTGAAAAGCTGCTGTAAAAGCTGACACACAGCCCTCCCAAGTG
                                                                                                                                                                                                                                                                                      121 AGCAGGACTGTTCTTCCCACTGCAATCTGACAGTTTACTGCATGCCTGGAGAGAACACAG
                                                                                                                                                                                                                                                                                                                    TGTTTTTTTTTTTGGCCGCAGCTGTGGATCTTGCCTTGGCCGCAGCCTATAACAACATTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCATGGACAGCATAGGAAAGAAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGAAGAAAGAAATGGTAGAGAATACAGAAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGGGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                                                                                                                                                                       TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCCGCAGCCTATAACAACTTTCGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTGCAGAGGGACGCGCCCCCTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 IGIGCAGAGGGACGCCCCCCCCCAAIACGAIGACTCGGIGCAGAGGCTGCAAGIGCIGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACATCATGGAAAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC
                                                                                                                                                                                           TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG
                                                                                                                                                                                                                                                                                                                                                             CAGCCATGGCAGCGTAGCAGCCCTGCGTTTTCAGACGGCAGCAGCTCGGGACTCTGGACGT
                                                                                                                                                                       Gaps
                                                                                                                                                                      ö
                                                                                                                                                  Length 2269
                                                                                                                                                                      Indels
                                                                                                                                                  DB 16;
                                                                                                                                                                      ;
                                                                                                                                                 Query Match
99.4%; Score 2269; D
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2269; Conservative 0; Mismatches
CURRENT APPLICATION NUMBER: US/10/373,561
CURRENT FILING DATE: 2003-02-24
FRIOR APPLICATION NUMBER: US/09/561,499
PRIOR FILING DATE: 2000-04-28
PRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SEQ ID NO 3
                                                                                           LENGTH: 2269
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                      ; ORGANISM: H
US-10-373-561-3
                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                             368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                           6 6 6
                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
```

ઠે g ઠે q Š g 840

847

720 787

727

667

8 8

8 6

g

8

547 540 607 1267

a

ò ያ ያ

8 6 8 6 8

8 6

; LENGTH: 2269 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-789-222-33	Query Match 99.4%; Score 2269; DB 19; Length 2269; Best Local Similarity 100.0%; Pred. No. 0;	Macches 2269; Conservative U; Mismacches U; indels U; Gaps 8 TGGGTTGTTATCTCCTCCAGCCTTGAGGGAGGGAACAACACTGTAGGATCTGGGG	TGGGTTGGTGTTTATCTCCTCCCAGCCTTGAGGGAGGGAACAACACACTGTAGGATCTGGGG 6 AGAGGAACAAAGGACCGTGAAAGCTGCTCTGTAAAAGCTGACACACAC	128 AGCAGGACTGTTCTTCCCACTGCAATCTGACTGTTATAAGCTGACAGCCCTCCCCAAGTG 1	OD 121 AGCAGGACHGTTCTCCCACHGCAATCTGACAGTTTACTGCAGGAGAGAGAACACACAG 180 QY 188 CAGTAAAAACCAGGTTTGCTACTGGAAAAAGGGAAAGGAAAGAGAAGACATTGACGGACC 247 CL 17 CAGTAAAAACCAGGTTTGCTTTTTTTTTTTTTTTTTTTT	248 CAGCCATGGCAGCGAGCCTGCGTTTCAGAGGAGAGCTTTCATTGACGGACTTCAGGACGTTCAGGACGTTCAGAGCGCAGCAGCAGCTCTGGACGTTCAGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCA	308 GIGITIGCCCTCAAGITIGCTAAGCTGCTGTTTATTACTGAAGAAGAATGTGGCAGAT	368 IGITICCLICARGINICCIARACTICCLICARGINIALISARGARAGANICIGAGARAT 3 368 IGITICTTACTCTGAGCTGTGATCTTGTCTTGCCCGCAGCCTATACAACTTTCGGAA 4	361 TGTTTTCTTTACTCTGAGCTGTGATCTTGTCTTGGCGGCGGCGGCTATAACAACTTTCGGAA 428 GAGCATGGACAGCAAAGAAGAAGAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC  [		548 TGTGCAGAGAGAGCGCGCTCGAATGCGATGACCTCGCTCG	608		728 GATAGAAATAGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA 	Qy 788 IGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC 847	Oy 848 CCTCTCGACAAATTGGAAAAACAATTTTTGGACCAGACCAGTGAAATAAAATT 907  Db 841 CCTCTCGACAAACAAATTGGAAAAAAAAAAAATTTTGGACCAGTGAAATTAAATT 900	908 GCAAGATAAGAACAGTTTCCTAGAAAAGAAGGTGCTAGCTA	Db 901 GCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGGTATGGAAGACAAGCACATCAT 960
Qy 1448 TAATCAGCAACGCTATGTGCTTAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507	Qy 1508 CTCATTGTATGAACATTTCTATCTCTCAAGFGAACTCAATTATAGGATTCACCTTAA 1567	QY         1568         AGGACTTACAGGGACAGCCAGCAAATAAGCAGCAACCAGGAAATGATTTTAG         1627           Db         1561         AGGACTTACAGGGACAGCAGCAAATAAGCAGCAACCAGGAAATGATTTTAG         1620	OY         1628         CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG         1687           DD         1621         CACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGG         1680	QY         1688         CTGGTCGTTTGATGCATCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA         1747           Db         1681         CTGGTCGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCA         1740	Oy 1748 GAACACAAATAAGTTCAACGGCATTAAATGGTACTGGAAAGGCTCAGGCTATTCGCT 1807 	Qy         1808         CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCCAGAGG         1867           Db         1801         CAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAAACATCCCAGTCCACTGAGG         1860	Oy 1868 AACTGTCTCGAACTATTTTCAAAGACTTAAGCCCAGTGCACTGAAAGTCACGGCTGCGCA 1927	Qy         1928         CTGTGTCCTTTCCACCACACACACACACGCGTGTGCTGACGGGACCCACATGCTCA         1987           Db         1921         CTGTGTCCTCTTCCACCACACACGGGTGTGCTCGGTGCTGACGGGACCCACATGCTCCA         1980	QY         1988         GATTAGAGCCTGTAAACTTTATCACTTGCATCACTTAAACGTCAAAGCAAGGAAGG	OY 2048 CCTAAACAICCAIAATIGIGATIAGACAGAACACCIAIGCAAAGAIGAACCGGAGGCTGA 2107	Oy 2108 GAATCAGACTGATTTACAGACGCTGCTGTCACAACCAAGAATGTTATGTGCAAGTTT 2167	Oy 2168 ATCAGTAAATAACTGGAAAACAGAACACTTATGTTATACAATACAGATCATCTTGGAACT 2227	OY 2228 GCATTCTTCTGAGCACTGTTTATACACTGTGTAAATACCCATATGTCCT 2276	RESULT 14 US-10-789-222-33 ; Sequence 33, Application US/10789222	; FUDITICATION NO. USZUG4U186054A1; GENERAL INFORMATION: ; APPLICANT: Yu, Qin ; TITLE OF INVENTION: Angiopoietin and Fragments, Mutants, and Analogs Thereof and Uses	; TITLE OF INVENTION: of the Same ; FILE REFERENCE: UPNOOD3-100 (P3115) ; CURRENT APPLICATION NUMBER: US/10/789,222 ; CURRENT FILING DATE: 2004-02-27		; SOFTWAKE: Patentin version 3.2 ; SEQ ID NO 33

\$ 8 \$ 8 \$

\$ g

8 6 8 6

8 8 8

	RESULT 15 US-10-827-759A-2 ; Sequence 2, Application US/10827759A ; Publication No. US20040248174A1 ; GENERAL INFORMATION: ; APPLICANT: The Trustees of the University of Pennsylvania ; APPLICANT: Michael Jotham Reich ; APPLICANT: Michael J. Tolentino ; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SIRNA ; TITLE OF INVENTION: INHIBITION OF ANGIOPOIETIN 1 AND 2 AND THEIR RECEPTOR TIE2 ; FILE REFREENCE: 43826-0005 US1 ; CURRENT APPLICATION NUMBER: US/10/827,759A ; CURRENT FILING DATE: 2004-04-19 ; DELICALIAND MEMBER: 105/463-981	PRIOR FILING DATE: 2003-04-18  NUMBER OF SEQ ID NOS: 736  SOFTWARE: FastSEQ for Windows Version 4.0  SEQ ID NO 2  LENGTH: 2269  TYPE: DAA  TYPE: DAA  FEATURE:  OTHER INFORMATION: target sequence  USING PARTICE  USING	Duery M Best Lo Matches	Qy         128         AGCAGGACTGTTCTTCCCACTGCAATCTGACATTACTGCATGCA
968 CCAACTACAGTCAATAAAGAAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1027	1208   TGCTGAAGTATCAAATCAGGACACCACAAATGGCATCTACACGTTAACATTCCCTAA   1267	1381 GGGATTTGGTACCTTCAGGGAAATATTGGCTGGGAATGACTTTGTTTTGCAACTGAACTGAACTGAACTGAACTGAACTGAACGCAACTGAACGCAACTGAACGCAACTGCAACGCAACTGAACGCAACACAACA		1741

8 6 8 6

6 B 6 B 6 B 6 B 6

Oy 1508 CTCATTGTATGAACATTTCTATCTCTCAAGTGAA DD 1501 CTCATTGTATGAACATTTCTATCTCTCAAGTGAA	OY 1568 AGGACTTACAGGGACAGCCGCAAAATAAGCAGC DD 1561 AGGACTTACAGGGACAGCCGGCAAAATAAGCAGC	1628	1688	1748		1868	1928	1988 G 1981 G	2048	2108	m	Oy 2228 GCATTCTTCTGAGCACTGTTTATACACTGTGTAA.	Search completed: July 29, 2005, 10:42:15 Job time : 2046.78 secs					
428 GAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACAC 487	TITICTICTICTICTAGATGGATGGCGCTTTTCTTCCTCCAGCCTAGGTGTCCAATGC 5	TGTGCAGAGGGCGCCGCCGCAATACGATGACTCGGTGCAGAGGCTGCAAGTGCTGGA	GAACATCATGGAAACAACACTCAGTGGCTAATGAAGCTTGAGAATTATATCCAGGACAA 	668 CATGAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAGACGGCTGTGAT 727 	GTTGAACCAAACAGCTGAGCAAACGCGGAAGTTAACTGA 	TGTGGAAGCCCAAGTATTAAATCAGACCACGAGACTTGAACTTCAGCTCTTGGAACACTC 8 	848 CCTCTCGACAAATTGGAAAAACAGATTTTGGACCAGACCAGTGAAATAAACAAATT 907 	908 GCAAGATAAGAACAGTTTCCTAGAAAGAAGGTGCTAGCTA	968 CCAACTACAGTCAATAAAAGAAGAAAGATCAGCTACAGGTGTTAGTATCCAAGCAAAA 1027 	1028 TICCATCATGATGAACTAGAAAAAAAAAGTGACTGCCACGGTGAATAATTCAGTTCT 1087 	1088 TCAAAAGCAGCAACATGATCTCATGAGACAGTTAATAACTTACTGACTATGATGTCCAC 1147 	12	1208 IGCTGAAGTATTCAAATCAGACACACAAAATGGCATCTACAGGTTAAACATTCCCTAA 1267 	1268 TTCTACAGAAGATCAAGGCCTACTGTGACATGGGAAGGCGGGGGGGG	1328 TATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGATATAAAGT 1387 	1388 GGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTT	1448 TAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTA 1507 	
8	3 8 8	8 8	\$ g	\$ q	දු දු	6 S	දු පු	දු පු	yo d	\$ g	& g	දු දු	g g	දු පු	oy ob	S 8	දු පු	

TGAACGGAATGTACTATCCACAGAGGCA 1747 ATTTCTAAACATCCCAGTCCACCTGAGG 1867 AAGAACTCAATTATAGGATTCACCTTAA 1567 SCATCAGCCAACCAGGAAATGATTTAG 1627 SCAATGTTCACAAATGCTAACAGGAGG 1687 ACTACTGGAAAGGCTCAGGCTATTCGCT 1807 CAGTGCACTGAAAGTCACGGCTGCGCA 1927 CGGTGCTGACGCGACCCACATGCTCCA 1987 TGCATCACTTAACGGACCAAAGCAAGAC 2047 ACCTATGCAAGGATGAACCCGAGGCTGA 2107 ACAACCAAGAATGTTATGTGCAAGTTT 2167 FITATACAATACAGATCATCTTGGAACT 2227 AATACCCATATGTCCT 2276 CO398106 AGENCOURT CN972676 20173 124 AV749794 AV749794 BU451988 603772372 CK959975 4101105 B BO6921116 AGENCOURT CB528841 UI.H-FT2-CB461678 721665 MA A1862415 tal6610.x AA125751 2123601.x AA125751 2123601.x AA125751 2123601.x CN983884 52256 5377 CN983884 52256 126 CR446566 CR446364 CR446566 CR446364 CR44656 CR446364 CR952957 UI.1-BCID CF52957 UI.1-BCID CF52957 UI.1-BCID CN956297 3797 1009 CF52957 UI.1-BCID

Searched:

Database

Result Š.

Sequence:

Run on:

```
Homo sapiens

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bummalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

(Dases 1 to 1215)

Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A.,

Todd,M.A., Tanenbaum,D.M., Civello,B.R., Lu,F., Murphy,B.,

Perriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J.,

Adams,M.D. and Cargill,M.

Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clark. A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark. A.G., Glanowski, S., Nielson, R., Lu, F., Murphy, B., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Perriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Direct Submission

Submitted (16-Nov-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
                                                                                                                                                                                                                                                                                                                       AY407058 1215 bp DNA linear GSS 15-DEC-
Homo sapiens ANGPT2 gene, VIRTUAL TRANSCRIPT, partial sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 646.4; DB 9;
Pred. No. 1.9e-182;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <li...>1215
/gene="ANGPT2"
/locus_tag="HCM2764"
                                                                                                   CB461678
AI862415
                                                                                                                                                                                   CR446366
CN956297
                                                                                                                                                                                                                    CN954601
CX484066
                                                                                                                                       BX734909
                                                                                                                                                 BU284080
                                                                                                                           AA125751
                                                                                                                                                                                                         CF529257
                                                                                                                                                                                                                                                                                                                                                 genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                            AY407058
AY407058.1 GI:39763029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.8%;
Matches 647; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene trios
4411.2
3390.7
3300.7
3300.7
3300.7
3300.3
3300.3
3300.3
3300.3
3300.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14671302
                                                                                                                                                                                                                                                                                                                                                                                  GSS.
2711.2
267.2
264.2
256.2
249.2
249.2
241.6
239.4
231.8
2239
                                                                                                                                                   221.2
218.2
216.4
207
202.2
202.2
194.2
                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                   RESULT 1
AY407058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL573084
Pan trogl
BX348832
Mus muscu
Mus muscu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus muscu
PM4-CT064
AGENCOURT
AGENCOURT
UI-M-HL0-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ie59h06.y
ie60e09.y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus muscu
BP307288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGENCOURT
B0815H12-
                                                                              July 29, 2005, 02:36:24; Search time 2288.57 Seconds (without alignments) 10777.765 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ie60e09.y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    zr77c09.r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71607 MAŘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ILLUMIGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   603667484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV116084 J
CV078760 J
CK903582 J
AA253509 B
B1962885 J
BN 962932 J
AW486232 J
                                                                                                                                                     1 ttcagagactgtgctgaagt.....tgatccgaccagcagatttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL573084 AY407059 BX348832 BX407060 AX4078622 AX019860 BF760470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BU171982 A
                                                                                                                                                                                                                                  68479088
               version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                           34239544 seqs, 19032134700 residues
                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                              US-10-603-293-5_COPY_1197_1844
                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                          nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BI962885
BI962932
AW486232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AK019862
AK019860
BF760470
CV116084
CV078760
CF951959
CK903582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP307288
BU416193
BU171982
CF169608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY407058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BX348832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AK088439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CN646781
                                                                                                                                                                           IDENTITY NUC Gapop 10.0 , Gapext 1.0
              GenCore (c) 1993 -
                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                  390
4257
634
897
800
603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2134
2083
1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1213
960
1218
2443
2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             487
758
823
652
597
353
561
                          Copyright
                                                                                                                                                                                                                                                                                                                                         EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72.3
72.3
72.3
69.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              449.4
442.6
389
370.8
353.8
333.8
323.8
311.8
311.8
311.8
224.6
273.2
273.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               635.4
592.8
553.2
528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           468.8
468.8
                                                                                                                                                                            Scoring table:
                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   468.8
                                                           OM nucleic
```

GSS 15-DEC-2003

ö

Gaps

ö

Length 1215; Indels

U

ö

09

ద à g ð g Š ద 8 ద ò 吊 δ 셤 ò g ð 셤 ò 셤 ò 셤

```
1189
                                                                                                                                                                                                                                                                                                                                                                                                                           1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2083 bp mRNA linear HTC 12-OCT-2004 CDNA clone IMAGE:4792831, containing frame-shift
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo saplens
blararycia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2083)
                                                                                                                                                                                                                                                                                                                         TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACCACGAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1250 GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1370 receaecreaeraareaecaaeecrarerecrraaaaraeaecraaeee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1430 AAIGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG
                                                                                                                                                                                                                                                                                                                                                                                  ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                            1190 ACAITCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1610 CTAACAGGAGGCTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCACACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1670 CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
                                                                                                                                                                                                                                                                                                 GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1310 GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAACAGGAGGCTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
                                                                                                                                                                                                             Length 2134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1730 GGCTATTGGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTC 1777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCTATTCGCTCAAGGCCACACCATGATGATCCGACCAGCAGATTTC
                                                                                                                            25-normalized"
                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                             Query Match 99.8%; Score 646.4; DB 3; Best Local Similarity 99.8%; Pred. No. 2.3e-182; Matches 647; Conservative 0; Mismatches 1;
                                                                                                                               Cot
                     1. .2134
/organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/clone="CSODIO37YG20"
/tissue_type="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta Cot/plasmid="Placenta"
  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:18490680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC022490
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BC022490
BC022490.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          errors
                                                                                                                                                                                                                                                                                                                                          1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
BC022490
  FEATURES
                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉼
                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage:
BP 191 9100 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
191 9100 (BENTY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          985 AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LNGZUDES 2134 bp mRNA linear HTC 21-JUL-2004 full-length cDNA clone CS0DI037YG20 of Placenta Cot 25-normalized cof Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAACAGGAGGCTGGTGTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                  360
                                           120
                                                                                   684
                                                                                                                            180
                                                                                                                                                  685 GGGTGGACAATTATTCAGCGACGTGGAGGATGGCAGCGTTGATTTTCAGAGACTTGGAAA 744
                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                       804
                                                                                                                                                                                                                                                                                                                                        864
                                                                                                                                                                                                                                                                                                                                                                                                                         924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACGAATGGCATCTACACGTTA 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2134)
1. ("Ja "Ne." of gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished
                                                             745 GAATATAAAGTGGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGGGTTGTT
                                                                                                                                                                                                                                                                                                                    805 TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                        121 GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                             GAATATAAAGTGGGATTTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                               241 TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          925 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
                                         ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact : Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCTATTCGCTCAAGGCCACAACCATGATCCGACCAGCAGATTC 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CR620685.1 GI:50501492
HTC; CNSLT CDNA.
HOMO BADIEDS (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 2134)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Faraday Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                 625
  565
                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165
                                       61
                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
CR620685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
```

COMMENT

420

540

```
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqrefégenoscope.cns.fr. Web : www.genoscope.cns.fr. Web is trand colnA was primed with a Notl: oligo(dIT) primer. Five prime end enriched, double-errand colnA was digested with Not I and cloned into the Not I and ECOR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AL573084 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA Clone CS0DI037YG20 3-PRIME, mRNA sequence.
                            1155 gegregacaarrarrcagceacercagearegcagcerrcarrrrcagagacrrgaaa 1214
                                                                                                                               1215 GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT 1274
                                                                                                                                                                                                                             1335 AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                               421 AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Li, (Basea I to 1028)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
On Peb 16, 2001)
On Peb 16, 2001 this sequence version replaced gi:31294447.
Contact: Genoscope
                                                                                                                                                                                                                                                                                                       301 AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                   361 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                     181 GAATATAAAGTGGGATTTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                           241 TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481 CTAACAGGAGGCTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 CCACAGAG-GCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTC
/tissue type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             For more information about this cluster, see http://www.genoscope.cns.fr/cdna?8=CSODI037BD10NP1&c=4496.r. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1635 AGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGTTTC 1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600 AGGCTATTCGCTCAAGGCCACATGATGATCCGACCAGCAGATTTC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DI037YG20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL573084.3 GI:46246304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL573084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
AL573084/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                           용
                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                       8
  Klausner, R.D., Collins, P.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.L., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Schetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., McEwan, K.J., Malek, J.A., Gunarane, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Halte, S., Garcia, A.M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Woung, A.C., Shevchenko, Y., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Saniutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S. J. and Marra, M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LIANL at: http://image.llnl.gov Series: IRAK Plate: 32 Row: b Column: 11
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4557314
This clone has the following problem: frame shifted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs-remail.nlh.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
CDNA Library Preparation: Michael J. Brownstein (NHGRI) & Shiraki
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINI)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1035 TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACGAATGGCATCTACAGACTA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACATTCCCTAATTCTACAGAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGGGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (01-FEB-2002) National Institutes of Health, Mammalian Submitted (10-FEB-2002) Cancer Genomics Office, National Cancer Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACCACAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.1%; Score 635.4; DB 3; Length 2083; 99.7%; Pred. No. 4.5e-179; ive 0; Mismatches 1; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="Brain, hypothalamus"
/talone_lib="NIH MGC_96"
/lab_host="DH10B"
/note="Vector: pBluescript"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4792831"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Director MGC Project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 (bases 1 to 2083)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .2083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
```

g \$ 8 8 trios

gene

```
JOURNAL
PUBMED
REFERENCE
AUTHORS
                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                              FEATURES
                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                      ä,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 אות 1213 bp DNA linear GSS 15-DEC-2003
Pan troglodytes ANGPI2 gene, VIRTUAL TRANSCRIPT, partial sequence,
genemic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
/note="lst strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Elemed into the state of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                  61 ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC 120
                                                                                                                                                                                                                                         887
                                                                                                                                                                                                                                                                    GGCTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA 180
                                                                                                                                                                                                                                                                                                     827
                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                             767
                                                                                                                                                                                                                                                                                                                                                                                                                        707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pan troglodytes
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
1 (bases 1 to 1213)
Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A.,
Fordi,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B.,
Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J.,
Adams,M.D. and Cargill,M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                  9
                                                                                                                                                                                                                           946 ACATTCCCTAATTCTACAGAAGAGATCAACGCCCTACTGTAACATGGAAGCTGGAGGAGGC
                                                                                                                                                                                                                                                                                     886 GGGGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGTTGGAAA
                                                                                                                                                                                                                                                                                                                               GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGATTTTAGCACAAAGGATGGAGCAACGACAAAATGTATTTGCAAATGTTCACAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                         TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                       766 recearcreacrasteacearcecrarerecriraaarracecriraaacreceaacec
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                706 AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAACAGGAGGCTGGTGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAACAGGAAGCTGGTTGTTGATGCATGTGCTCCTTCCAACTTGAACGGAATGTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
                                                                                                                                                                                                                                                                                                                                                           826 GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                        Gaps
                                                                                                                      4;
                                                                                       Length 1028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCACCAGCAGTTTC 648
                                                                                                                    Indels
                                                                                     91.5%; Score 592.8; DB 1; 96.9%; Pred. No. 2.2e-166; iive 7; Mismatches 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AY407059.1 GI:39763030
                                                                                                     Best Local Similarity 96.9
Matches 628; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĀY407059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            646
                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AY407059
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                         DRIGIN
                                                                                                                                                  à
                                                                                                                                                                          셤
                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

TITLE

```
BX348832 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CS0DI037YG20 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1075 GGTCCTTCCAACTTGAACGGAATGTACTATCCACAAAGGCAGAACACAAATAAGTTCAAC 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             955 GGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGCAGACAAC 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1015 GACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGGGCTGGTGGTTTTGATGCATGT 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1135 GGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTGGCTCAAGGCCACAACCATGATG 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  894
                                       Clark, A.G., Glancowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glancowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Shinsky, J.J., Adams, M.D. and Cargill, M. Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          655 GCCTACTGTGACATGGAAGCTGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTAAAATACACCTTAAAAGACTGGGAAGGGAATGAGGCTTACTCATTGTATGAACATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           895 TATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAGGCCCACAACCATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTACTGTGACATGGAAGCTGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGGATTTGGTAACCCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 715 GGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGAATATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACACAATAAGTTCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1213;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 553.2; DB 9;
Pred. No. 1.8e-154;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                      /organism="Pan troglodytes"
/mol type="qenomic DNA"
Science 302 (5652), 1960-1963 (2003) 14671302
                                                                                                                                                                                                                                                                                                                                           /mol_type="genomic_DN/db_xref="taxon:9598"
                                                                                                                                                                                                                                                                                                                                                                                      <1. .. >1213
/gene="ANGPT2"
/locus_tag="HCM2764"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              631 ATCCGACCAGCAGATTTC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85.4%;
                                                                                                                                                                                                                                                                                               1, .1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
BX348832
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
```

951

```
AY407060 1218 bp DNA linear GSS 15-DEC-2003
Mus musculus ANGPT2 gene, VIRTUAL TRANSCRIPT, partial sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 1218)
Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wangy G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams, M.D. and Cargill,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA This sequence was made by sequencing genomic exons and ordering them based on alignment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gegregacaccaacacceaagaagargecagregacriccagagagaccicgaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCAGAGACTGTGCGGAAATCTTCAAGTCAGGACTCACCACCAGTGGCATCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                   CTAACAGGAGGCTGGT - - GGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACT
                               539 ATCCACAGAGGCAGAACACAAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72.3%; Score 468.8; DB 9; Length
llarity 82.7%; Pred. No. 4e-129;
Conservative 0; Mismatches 112; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Science 302 (5652), 1960-1963 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .1218
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /locus_tag="HCM2764"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="ANGPT2"
                                                                                                                                                                                                                                                                                                                                                                                  genomic survey sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          AY407060.1 GI:39763031
                                                                                                                                                                                                                              952 ACAGCTTTT 960
                                                                                                                                                                                   599 CAGGCTATT 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 536; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene trios
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                              RESULT 7
AY407060
                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                   В
                                             셤
                                                                                                                                                                                     8
                                                                                               8
                                                                                                                                                                                                                                              Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
1st greef@genoscope.cns.fr, Web : www.genoscope.cns.fr, Web retrained cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://www.genoscope.cns.fr/cdna?s=CS0BAG030ZC09_CS02851_1&c=4496.r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCÁGGA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAAT-AGCAGCATCAGCCAACCAGGA 772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGATTTTAGCACAAGGATGGGAGACACGACAAATGTATTTGCAAATGTTCACAAATG 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAAGGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            594 TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGNGAAGGG 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TICAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="CSODI037YG20"
/tissue type="PLACENTA COT 25-NORMALIZED"
/clone lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lib strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-etrand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                 Craniata, Vertebrata, Buteleostomi;
Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 528; DB 5; Length 960;
Pred. No. 6.2e-147;
0; Mismatches 28; Indels
                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Verti
Mammalia; Eutheria; Primates; Catarrhini; Hor
1 (bases 1 to 960)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Mill-length CDNA libraries and normalization
Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        For more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81.5%;
                                                             sapiens (human)
                                                                                                                                                                                                                                         Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 577; Conserv
               BX348832.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               474
                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

ö

627

음. 참 셤 ò

В

8 ò 요 ઠે 셤 Š

ઠે

ò

9

120

687

747

a

ð 원 ò

ð 임 ò g

à 원 8 셤

```
by (Dabes 1 to 2443)

Adachi,J., Alzawa,K., Akimura,T., Arakawa,T., Bono,H., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara,A., Hashizume,W., Hayashida,K., Hayatsu,M., Hiraoka,T., Hirozane,T., Hori,F., Imotani,K., Ishii,Y., Itoh,M., Kagawa,I., Kasukawa,T., Katoh,H., Kawai,J., Kojima,Y., Itoh,M., Kagawa,I., Kuatsuyama,T., Miyazaki,M., Murata,M., Mustuyama,T., Miyazaki,M., Murata,M., Mustuyama,T., Miyazaki,M., Mustu,M., Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Okazaki,Y., Salto,R., Saitoh,H., Sakai,C., Sakai,K., Sakazume,N., Sano,H., Sasaki,D., Shibata,K., Shinagawa,A., Takahu-Akahira,S., Takeda,Y., Tanaka,T., Tomaru,A., Toya,T., Yasunishi,A., Muramitsu,M. and Hayashizaki,Y. Toya,T., Yasunishi,A., Direct Submission

Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research Group, RIKEN Genome Exploration Research Group, RIKEN Genome Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gec.riken.jp, URL:http://genome.gec.riken.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            foodom start=1
/brotein id="BAC33396.1"
/brotein id="BAC33396.1"
/brotein id="BAC33396.1"
/brotein id="BAC33396.1"
/brotein id="WMWITELTHEWITHERSAYSNERKSYDSTGRROYQVQNGPCSYTFILPETDSCRSSSSPYMSNAVQRDAPLDYDDSVQRLQVLENILENNTQWLMKTLENYIQ
FLLPETDSCRSSSSPYMSNAVQRDAPLDYDDSVQRLQVLENILENNTQWLMKTLENYIL
LQHSTSTNKLEKQILDQTSSINKLONKNSFLEQKYLDMGGKHSEQLDELQV
LVSKQSSYIDELEKKLYTATVNNSLLQKQQHDLMFTVNSLLTMMSSPNSKSSYNIRE
EQTTFRDCABIFKSGLTTSGIYTLTFPNSTEEIKAYCDMDVGGGGWTVIQHREDGSUD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FÖRTWKEYKEGFGSPLGEYWLGNEFVSQLTCQHRYYLKIQLKDWEGNEAHSLYDHFYL
AGEBSNYRIHLTGLTGTAGKISSISQPGSDFSTKDSDNDKCICKCSQMLSGGWWFDAC
GPSNLNGQYYPQKQNTNKFNGIKWYYWKGSGYSLKATTWMIRPADF"
                                                                                                                                                   Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation 6 60,770 kull-length cDNAs
Nature 420, 563-573 (2002)
6 (bases 1 to 2443)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone lib="RIKEN full-length enriched mouse cDNA library"
«dev stage="16 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
Please visit our web site for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note="unnamed protein product; ANGIOPOIETIN-2 PRECURSOR
(SWISSPROT|035608, evidence: FASTY, 99.6%ID, 100%length,
                                                                                                                        The FANTOM Consortium and the RIKEN Genome Exploration Research
                                 annotation of a full-length mouse cDNA collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 2443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Mus musculus"
/mol_type="mRNA"
/db_type="FANTOM DB:C130089A05"
/db_xref="faNTOM DB:C130089A05"
/clone="C130089A05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72.3%; Score 468.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/
Location/Qualifiers
                                                             Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           natch=1488)
         FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . . 2443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         outative
                                        Functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                              TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                        AUTHORS
                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1108 ccacaaaaacadaaracaaaraaarraadrirraacderarcaagregracracregaagdggrec 1167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shibata,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A., Yamamoto,R., Matsumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Warchiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. sequencing pipeline with 384 multicapillary sequencer General Conneces 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-APR-2004
                                                                                                                                                                                                                                                                                                                                481 CTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT 540
808 TCCCAGCTGACCGGTCAGCGTACGTGCTTAAGATCCAGCTGAAGGAACTGGAAGGC 867
                                                                                                                                                                            AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG 360
                                                                                                                                                                                                                                      868 AACGAGGGCGCATTCGCTGTATGATCACTTCTACCTCGCTGGTGAAGAGTCCAACTACAGG 927
                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                   421 AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AKV48622

Mus musculus 16 days embryo head cDNA, RIKEN full-length enriched library, clone:Cl30089A05 product:ANGIOPOIETIN-2 PRECURSOR, full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                 361 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carninci, P. and Hayashizaki, Y.
ligh-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AK048622.1 GI:26339449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AK048622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             886
                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                        928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE
PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AK048622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
```

g

a ò 셤 8 셤

ò

```
Adachi, J., Alzawa, K., Akahira, S., Akimura, T., Arai, A., Aono, H., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Furuno, M., Hanagaki, T., Hara, A., Hayateu, N., Hiramoto, K., Hiramoto, K., Hiramoto, K., Hiramoto, K., Mishi, Y., Itoh, M., Izawa, M., Kasukawa, T., Kato, H., Kawai, J., Kojima, Y., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Okazaki, Y., Okido, T., Owa, C., Saito, H., Saito, R., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Shibata, Y., Toya, T., Yasunishi, A., Yoshido, T., Owa, C., Suzuki, H., Tagami, M., Tagawa, A., Takhashi, F., Tanaka, T., Tojima, Y., Toya, T., Yamamura, T., Yasunishi, A., Yoshido, K., Varanateu, M. and Hayashizaki, Y. Toya, T., Direct Submission Submitted (18-AUG-2000) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research Group, RIKEN Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suchiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-reseggsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
Please visit our web site (http://genome.gsc.riken.jp/) for further
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (Dases I to 2475)
                                                             Shibata,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A., Yamamoto,R., Matsumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Yoneda,X., Inhikawa,T., Ozawa,Y., Izawa,M., Ohara,E., Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKEN integrated sequence analysis (RISA) system--384-format Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                                                                                                                         The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                      FANTOM Consortium. Farther than the full-length mouse cDNA collection Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="FANTOM DB:5031400E18"
/db_xref="taxon:10090"
/clone="5031400E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   details.
                       11042159
                                                                                                                                                                                                                                                                                                                                                11076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                         MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                       AUTHORS
                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-APR-2004
                                                                                                         1322 rccchgcrchcccgrccagcaccgcracgractrahagarcchgcrgahagacrcagaraga 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crcrcadadacregregrirancecardregrecriccaacrigaaregacagracrac 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1142 ACCTTCCCCACTCCACAGAGAGATCAAGGCCTACTGTGACATGGACGTGGAGGA 1201
                                                                                                                                                                                                                                                                                                                      202 gegrégaciacicarceaacacegagaagargaegacigegacriceagaggaegregaaa 1261
                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAACAGGAGGCTGGTGTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA 600
                                                                                                                                                                         61 ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AK019860

Mus musculus 11 days pregnant adult female ovary and uterus CDNA, RIKEN full-length enriched library, clone:5031400E18

product:ANGIOPOIETIN-2 PRECURSOR, full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Butheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                           GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                          1 TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                            GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGTTTC
                         0; Mismatches 112; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
       Pred. No. 5e-129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AK019860.1 GI:12860231
HTC; CAP trapper.
Mus musculus (house mouse)
  82.7%;
                            Matches 536; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AK019860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .0349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AK019860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
```

a

ð

g

δ

원

ð

셤

ઠે

g

ò

요

ò

ò

/sex="female"

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases I to 487). Rolass I to 487. Magai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., O'Hare, M.J., Soares, F., Brentani, R.P., Jongeneel, C.V., Simpson, A.J., Simpson, A.J.
                                                                                                            BF760470 487 bp mRNA linear EST 12-JAN-2001
PM4-CT0641-211200-006-e08 CT0641 Homo sapiens cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM4&t2=PM4-CT0641-211200-006-e08&t5=2000-12-21&t4=1)
Seq primer: puc 18 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /dev_stage="Adult"
/clone lib="CT0641"
/clone lib="CT0641"
/note="Crogan: colon, Vector: puc18; Site_1: SmaI; Site_2:
SmaI; A mini-library was made by cloning products derived
from ORESTES PCR (U.S. Letters Patent application No.
196,716 - Ludwig Institute for Cancer Research) profiles
into the DUC 18 vector. Reverse transcription of tissue
mRNA and cDNA amplification were performed under low
stringency conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364 TTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGACTA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      424 GGATGGCGGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             147 GGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTTGGTAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTTTCGCAACTGACTAATCAGCAACGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87 CAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAATTATTCAGCGACGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 484 CACGTGCCATTGTGACATGGAAGCTGGAGGAGGGGGGTGGACAATTATTCAGCGACGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
  1714 GGCTACTCGCTCAAGGCCACAACCATGATGATCCGGCCAGCAGATTTC 1761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000) 20202663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69.4%; Score 449.4; DB 2; Length 98.7%; Pred. No. 2e-123; ive 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High quality sequence start: 19
High quality sequence stop: 487.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                            BF760470.1 GI:12108370
                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: +55-11-2704922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brazil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                RESULT 10
BF760470/c
                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                              LOCUS
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                          ö
             /tissue type="ovary and uterus"
/clone_lib="RIKEN full-length enriched mouse cDNA library"
/dev_stage="11 days pregnant adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.414 AACGAGGGCATTCGCTGTATGATCACTTCTACCTCGCTGGAAGAGTCCAACTACAGG 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1354 TCCCAGCTGACCGGTCAGCACCGCTACGTGCTTAAGATCCAGCTGAAGGACTGGGAAGGC 1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1594 CTCTCAGGAGGCTGGTGGTTTGACGCATGTGGTCCTTCCAACTTGAATGGACAGTACTAC 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1654 ccacaaaacagaaracaaraaarraacgrirraacgararcaagregracracregaaggegrec 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 ACATTCCCTAATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTATTTGCAAATGTTCACAAATG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTAT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09
                                                                                                       /note="unnamed protein product; ANGIOPOIETIN-2 PRECURSOR (SWISSPROT 035608, evidence: FASIY, 99.6%ID, 100%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACAGAGGCAGAACACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACCACAAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 2475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches 112; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 468.8; DB 3;
Pred. No. 5e-129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="putative"
2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2459. .2464
                                                                                                                                                     match=1488)
                                                                                                                                                                              putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 536; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                     CDS
```

õ g δ 셤 ઠે g δ g ò a ò 셤 ò 유 à g ò g ò g

ö

ö

g

8

셤 ò

ઠ

셤

ઠે

ò

```
S23 bp mRNA linear EST 25-AUG-2004 AGENCOURT 31478860 NIH MGC 251 Rattus norvegicus cDNA clone IMAGE:7386206 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422 AAGGATTCGGACAATGACAATGCATCTGCAAGTGTTCCCAGATGCTCACAGGGGGCTGG 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    615
                                                                                                                                                                                                                                 76 ACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAATTATT 135
                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         316 TIGIATGAACATTICTATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAAGA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        436 AAGGATGGAGAACAAACGACAAATGTATTGCAAATGTTCACAAATGCTAACAGGAGGCTGG 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       496 TGGTTTGATGCATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAAC 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               542 Accaaraagricaacegrarcaagregracrecrecaagegerceerracreercaag 601
                                                                                                                                                                                                                                                                                                                                 136 CAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGA 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               256 CAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTACTCA 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       242 geschrecthacenschehahrechschehaschehaschehaschehascheharen 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302 cretareaccircraccrercesceaseascreaccaacracascarreacciracassa 361
                                                                                                                                                                                                                                                                                 62 Acadadosadorcaadoccracrorocarodacarodorodados de de 121
                                                                                                                                                                                                                                                                                                                                                                              122 chacacceeehaehteecheeerreacricchehearereehaheerraaneareeec 181
                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     482 TGGTTCGACGCATGTGGTCCTTCCAACTTGAATGGACAGTACTACCCACAAAAGCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556 ACAAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAG
                                                                                                                                    16 GAAGTATTCAAATCAGGACACACACAAATGGCATCTACACGTTAACATTCCCTAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                1 (Dases 1 to 823)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Genemics
National Cancer Institute / NIH
Bldg. 31 RmlOA07 Betheada, MD 20892
Email: cgapbs-r@mail.nih.gov
                                                                                       Gaps
                                                                                          ö
                                          Length 758;
                                                                                          Indels
                                          Score 442.6; DB 7;
Pred. No. 2.5e-121;
0; Mismatches 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCACAACCATGATGATCCGACCAGCAGATTTC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCACGACCATGATGATCCGGCCAGCAGATTTC 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CV078760.1 GI:51545791
                                          Query Match 68.3%;
Best Local Similarity 81.2%;
Matches 514; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CV078760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CV078760
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                            8
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue type="whole placenta, 2 pooled"
/lab_host="whole placenta, 2 pooled"
/lab_host="nDH10B TonA"
/clone lib="NIH MGC_208"
/note="Organ: placenta, vector: pExpress-1; Site_1: EcoRV;
Site_2: Not1; Tissue was collected from two pooled
placentas from the 21st day of pregnancy. 1st strand cDNA
was primed with a Not 1 - oligo(dT) primer,
double-stranded cDNA was cloned into the Not I and EcoRV
sites of pExpress-1. Library was size-selected for >1.25
kb fragments for an average insert size of 2.05 kb. A
normalized version of this library is also available
(NIH MGC_270). Library was constructed by Open Biosystems
(Huntsville, AL). Note: this is a Mammalian Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            In the Marker Library (MGC)

National Institutes of Health, Mammalian Gene Collection (MGC)

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics

National Cancer Genomics

National Cancer Institute / NIH

Bldg. 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Josef Lazar, Dr. Howard J. Jacob, Medical

College of Wisconsin.

CONA Library Preparation: Open Biosystems

CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://mage.llh.gov

Plate: LLAM15735 row: g column: 01

High quality sequence stop: 594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 30-AUG-2004
TGTGCTTAAAATACACCTTAAAGACTGGGAAGGGAATGAGGCTTACTCATTGTATGAACA 326
                                                                                                                                                                                            446
                                                                                                                                                                                                                     386
                                                                                                                                       244 TITICIACCICICAGIGAAGAACICAATIATAGGATICACCITAAAGGACITACAGGGAC 185
                                                                                                                                                                                                                                                                                        CAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGC 506
                                                                                                                                                                                                                                                                                                                    CAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTTGATGC 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                            AGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CV116084 1522930 NIH_MGC_269 Rattus norvegicus cDNA clone
IMAGE:7462299 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                        507 ATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACA 545
                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTGGTCCTTCCAACTGAACGGAATGTACTATCCACA 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .758
/organism="Rattus norvegicus"
/mol_type="mRNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="IMAGE:7462299"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CV116084.1 GI:51634565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 758)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus
                                                                                                                                                                                                                                                                                                                                        124
                                                                                                                                                                                                                                           184
                                                                                                                                                                                            387
                                                                                                                                                                                                                                                                                           447
     267
                                                  304
                                                                                                 327
                                                                                                                                                                                                                                                                                                                                                                                                                                       64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CV116084
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
```

```
/tissue_translations.
/dev stage="9.5 dpc"
/dev stage="9.5 dpc"
/lab_host="DHIOB (TI phage resistant)"
/clone lib="NIH BMAP HLO"
/clone lib="NIH BMAP HLO"
/note="Organ: Head; Vector: pXX-Asc; Site 1: EcoR I;
Site 2: Not I; The library was constructed according Site 2: Not I: The library was constructed according Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. Denatured RNA was size fractionated on a 1% agarose gel.First strand cDNA was spined with Oligo-dr primer containing a Not I site. Double strand cDNA was size selected according to mRNA size fraction, ligated with EcoR I adaptor, digested with NotI and then cloned directionally into pXX-Asc vector. The library tag sequence located between the Not I site and the polyA tail is CGAACTGAAT. This library was created for the University Iowa Brain Anatomy Project (BMAP): 'Gene Discovery in the Developing Mouse Nervous System', supported by National Institute of Mental Health (NIMH)."
                                                                                                                                                      CF951959 652 bp mRNA linear EST 20-NOV-2003
UI-M-HLO-Cnc-f-02-0-UI.rl NIH_BMAP_HLO Mus musculus cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. James Lin University of Iowa
Tissue Procurement: Dr. James Lin University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found at
http://genome.uiowa.edu/distribution/mousefl.html
This clone was contributed by the Brain Molecular Anatomy Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          246
                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
1 (bases 1 to 652)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247 TCTGGGAGAGTACTGGCTGGGCAATGAGTTTGTCTCCCAGCTGACCGGTCAGCACCGCTA 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAGGCCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAATTATTCAGCGACGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147 GGATGGCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187 AGATGGCAGTGTGGACTTCCAGAGGACGTGGAAAGAATACAAAGAGGCCTTCGGGAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAGGAGAATATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57.2%; Score 370.8; DB 7; Length 652; 81.6%; Pred. No. 8.7e-100; ive 0; Mismatches 97; Indels 0
                                                                                                                                                                                                                  IMAGE:30634009 5', mRNA sequence.
CF951959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:10090"
/clone="IMAGE:30634009"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seq primer: pYX-5.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/strain="C57BL/6"
                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
         541 TCCGGCCAGCAGATTTC 557
                                                                                                                                                                                                                                                                             CF951959.1 GI:38467828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 429; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ....652
                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                       RESULT 13
CF951959
LOCUS
                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db xref="taxon:10116"
/clone="thadBs:7386206"
/lab host="DHH MGC 251"
/clone lib="NIH MGC 251"
/note="Organ: thymus; Vector: pExpress-1; Site 1: EcoRV; Site 2: Not1; RNA obtained from testis tissue of 8 wk old animal: Tissues were snap-frozen and kept at -80C before RNA extraction and purification (Tri-reagent method). cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                was primed using oligo-dT primer:
5.-pGACTAGATCCTAGATCCGGAGGGCGCCT(7)25-3' and cloned into
the EcoRV/NotI sites of pExpress-1. Size-selection >1.25kb
resulted in an average insert size of 1.6 kb. This primary
library is normalized (non-normalized primary library is
NIH MGC 250) and was constructed by Open Biosystems. Note:
this is a NIH_MGC library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGCGTTGACTTCCAGAGAACGTGGAAAGAGTACAAAAGAGGCTTCGGGGAGCCTCTGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCTCTCAAGTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCG 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 ACCTGTCCGGCGAGGAGTCCAACTACAGGATTCACCTTACAGGACTCACAGGCGCGGGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAAAATCAGTAGCATCAGCCAACCAGGAAGTGATTTTTAGCACAAAGGATTCGGACAATG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTATCAAGTGGTACTACTGGAAGGGTCCGGTTACTCGCTCAAGGCCACGACCATGATGA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAAAATACACCTTAAAGACTGGGAAAGGGAATGAGGCTTACTCATTGTATGAACATTTCT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361 ACAAATGCATCTGCAAGTGTTCCCAGATGCTCACAGGAGGCTGGTGGTTCGACGCATGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACACAAATAAGTTCAACG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ceracreracareaacareaareaacaacaacareaacaacareaacacacaaaaaare 60
                                                  COUNT Library Preparation: Open Biosystems
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM15553 row: p column: 12
High quality sequence stop: 670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGCGTTGATTTTCAGAGGACTTGGAAAGAATATAAAGTGGGATTTGGTAACCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCTTCCAACTTGAATGGACAGTACTACCAACAAAAGCAGAATACGAATAAGTTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTACTGTGACATGGAAGCTGGAGGAGGCGGGTGGACAATTATTCAGCGACGTGAGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAATATTGGCTGGGAAATGAGTTTGTTTCGCAACTGACTAATCAGCAACGCTATGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 gagagrarregeregecaacgagrrrerereceaecreaecaggegecaregerae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 TGAAGATCCAGCTGAAGGACTGGGAAGGCAGGGGGCACACTCTCTGTATGAGCACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTTAGCACAAAGGATGGAGACAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGTTGATGCATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Tissue Procurement: Drs. Josef Lazar & Howard Jacob, Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches 105; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 389; DB 7; L
Pred. No. 3.2e-105;
                                                                                                                                                                                                                                                                                                                                                               /organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCGACCAGCAGATITC 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 81.1
Matches 452; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           632
                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DRIGIN
```

원 δ В ઠે 셤 ò 셤 8 g ð g ò a à g ò g

ö

셤

8

a

g

ò

g

ઠે

셤

δ

ઠે

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CK903582 ie60e09.y5 Melton Normalized Human Islet 4 N4-HIS 1 Homo sapiens cDNA clone IMAGE:5671385 5' similar to TR:015123 015123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Life Technologies). cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Melton, D., Meddows, A., Clifton, S., Hillier, L., Marra, M., Pape, D., Wylie, T., Martin, J., Blistain, A., Schmitt, A., Theising, B., Ritter, E., Ronko, I., Bennett, J., Cardenas, M., Gibbons, M., McCann, R., Cole, R., Tsagareishvili, R., Williams, T., Jackson, Y. and
                                                                                                                                                                                446
                                                                                                                                                                                                                                                                       506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  read has been verified (found to hit its original self in the
                                                                                                                               circiaccrecidadadarccaacracadarreacerracadaacreacededac 426
                                                                                                                                                                                                                          cecesecaaaaraacraecarcaeccaaccaecaacraercarririaecacaaacaarrecea 486
                                                                                                                                                                                                                                                                                                                                                                                                           909
                                            cgrectraagarccaecreaarreacregaaagecaacgagegegearregererearea 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cambridge,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 597)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clome lib="Melton Normalized Human Islet 4 N4-HIS 1" /note="Organ: Pancreas; Vector: pSPORT1; Site 1: Not 1; Site 2: Sal 1; Starting library constructed using SuperScript Plasmid Library kit (Life Technologies). cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 617-495-1812
Fax: 617-495-8557
Email: dmelton@biohp.harvard.edu
This read is a 5' RESEQUENCE of a previously sequenced pancreas
                                                                                                                                                                                                                                                                       CAACGACAAATGTATTTGCAAATGTTCACAAATGCTAACAGGAGGCTGGTGGTTTGATGC
                                                                                                                                                                                                                                                                                                                                                                                        ATGTGGTCCTTCCAACTTGAATGGACAGTACTACCCACAAAAACAGAATACAAATAAGTT
TGTGCTTAAAATACACCTTAAAGACTGGGGAATGAGGCTTACTCATTGTATGAACA
                                                                                         TITCIAICICICAAGIGAAGAACICAATIAIAAGATICACCIIAAAGGACTIACAGGGAC
                                                                                                                                                                                AGCCGGCAAAATAAGCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGA
                                                                                                                                                                                                                                                                                                                 caargacaaargcarcrigcaagrigrirccagargcricricaggaggcriggrigargc
                                                                                                                                                                                                                                                                                                                                                              ATGTGGTCCTTCCAACTTGAACGGAATGTACTATCCACAGAGGCAGAACACAAATAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi Inoue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endocrine Pancreas Consortium
Harvard University, Howard Hughes Medical Institute
Dept of Molecular and Cellular Biology, 7 Divinity Ave,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 607 TAACGGTATCAAGTGGTACTACTGGAAGGGTCCGGCTACTCGCTC 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAACGGCATTAAATGGTACTACTGGAAAGGCTCAGGCTATTCGCTC 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Langerhans"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WashU-Harvard Pancreas EST Project
Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="Islets of /dev_stage="Adult" /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANGIOPOIETIN-2. ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5671385"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          correct orientation)
Seg primer: -40RP from Gibco.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CK903582.1 GI:45365113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sex="Both"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . .597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CK903582
                                                                                                                                   367
                                               307
                                                                                                                                                                                  387
                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                         447
                                                                                                                                                                                                                                                                                                                    487
                                                                                                                                                                                                                                                                                                                                                                   507
                                                                                                                                                                                                                                                                                                                                                                                                           547
                                                                                                                                                                                                                                                                                                                                                                                                                                                          567
    267
                                                                                           327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CK903582
```

```
made by oligo-dT priming. Size-selected by column fractionation, average insert size 1.08 kb. Library was amplified once on solid support and plasmid DNA from library was prepared. The library DNA was normalized by method #4 from Bonaldo, Lennon, and Soares 1996 Genome Research 6.791-806; 0.5 microgram single-stranded library plasmid DNA was mixed with 5 micrograms PCR, product representing library inserts and hybridized to an Ecot of 20. Single-stranded (unhybridized) plasmids were isolated by hydroxyapatite chromatography and used to make this library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA253509 353 bp mRNA linear EST 06-AUG-1997 zr77c09.rl Soares NhHMPu Sl Homo sapiens cDNA clone IMAGE:669424 5' similar to TR:G285989 G285989 ORF, COMPLETE CDS. ;, mRNA sequence. AA253509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 ACATTCCCTAATTCTACAGAAGAAGATCAAGGCCTACTGTGAAAGCTGGAAGGAGGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 353)
Hillier, L., Allen, M., Bowles, L., Dubuque, T., Geisel, G., Jost, S., Kucaba, T., Lacy, M., Le, N., Lemnon, G., Marra, M., Martin, J., Moore, B., Schellenberg, K., Steptoe, M., Tan, F., Theising, B., White, Y., Wylie, T., Waterston, R. and Wilson, R. WashU-Merck EST Project 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contract: Wilson RK
Washington University School of Medicine
4444 Porest Parkway, Box 8501, St. Louis, MO 63108
4442 Forest Parkway, Box 8501, St. Louis, MO 63108
Fal: 314 286 1810
Fax: 314 286 1810
Fax: 314 286 1810
Fax: 314 286 1810
Fax: 315 260 1810
Fax: 315 360
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 AAIGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTAT 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATATAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGAGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATATAAAAGTGGGATTTGGTAACCCTTCAGGAGAATATTGGCTGGGAAATGGTTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCAGAGACTGTGTAAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 353.8; DB 7;
Pred. No. 1.1e-94;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA253509.1 GI:1885684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54.6%;
llarity 99.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 355; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
AA253509
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
```

Location/Qualifiers

FEATURES

```
/db_xref=="taxon:9606"
/db_xref=="taxon:9606"
/clone="IMAGE:669424"
/tissue_type="Pooled human melanocyte, fetal heart, and pregnant uterus"
/lab host="Daylub"
/clone lib="Soares NhHMPu_SI"
/clone lib="Soares NhHMPu_SI"
/note="Organ: mixed (see below); vector: pT7T3D-Pac
/note="Organ: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281 ACCTTAAAGACTGGGAAGGGAATGAGGCTTACTATTGTATGAACATTTCTATCTCTAA 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAGAACTCAATTATAGGATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAA 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGCATCAGCCAACCAGGAAATGATTTTAGCACAAAGGATGGAGACAACGACAAATGTA 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITIGCAAATGITCACAAATGCTAACAGGAGGCTGGTGGTTTGATGCATGTGGTCCTTCCA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rrrdcaaargrrcacaargcraacaggaggcrgrgrrrgargcargrgrcrrcca 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTIGAACGGAAIGIACIAICCACAGAGGCAGAACACACAAAIAAGIICAACGGCAIIAAAI 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 ACTTGAACGGAATGTACTATCCACAGAGGCAGAACACAATAAGTTCAACGGCATTAAAT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTACTACTGGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGAT 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 53.6%; Score 347.2; DB 1; Length 353; Best Local Similarity 99.1%; Pred. No. 8.7e-93; Matches 349; Conservative 0; Mismatches 3; Indels 0
                              /organism="Homo sapiens"
                                                          /mol_type="mRNA"
/db_xref="GDB:5563391"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  581
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

Search completed: July 29, 2005, 09:49:54 Job time : 2294.57 secs